FRi/T85

FAO Fisheries Technical Paper No. 85
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FRi/T85
RE - Institutions

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DIRECTORY OF FISH CULTURE RESEARCH INSTITUTIONS

Prepared by

Fish Culture Section
Inland Fishery Branch
Fishery Resources and Exploitation Division
Department of Fisheries

FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS
ROME, 1969

DOCUMENTS OF THE FISHERY RESOURCES AND EXPLOITATION DIVISION OF FAO DEPARTMENT OF FISHERIES

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FAO Fisheries Report **FR /R (No.)**
FAO Fisheries Circular **FR /C (No.)**
FAO Fisheries Synopsis **FR /S (No.)**

Special groups of synopses are identified by symbols followed by classification numbers based on indexed code of "Current Bibliography":

SAST	Data concerning certain species and fish stocks.
MAST	Information on methods and subjects.
OT	Oceanographic data.
IT	Limnological data.
	and
CART	Information concerning fisheries and resources of certain countries and regions (FID/S).

Des catégories spéciales de synopses sont identifiées à l'aide de symboles suivis des chiffres de classification basés sur le code d'indexation de la « Current Bibliography »:

SAST	Données sur certaines espèces et populations de poissons.
MAST	Renseignements sur des méthodes et des sujets.
OT	Données océanographiques.
IT	Données limnologiques.
	et
CART	Renseignements sur les pêcheries et les ressources de certains pays et régions (FD/S).

Grupos especiales de sinopsis se distinguen con las siglas siguientes, seguidas por números de clasificación que se basan en las claves de los índices de la « Current Bibliography ».

SAST	Datos relativos a ciertas especies y poblaciones.
MAST	Sinopsis sobre métodos y materias.
OT	Sinopsis sobre oceanografía.
IT	Sinopsis sobre limnología.
	y
CART	Información sobre los recursos acuáticos vivos de algunos países y regiones (FID/S).

FAO Fisheries Technical Paper **FR /T (No.)**

Special groups of Technical Papers are identified by:

RE	Indexed lists of experts and institutions drawn from Registers maintained by the Fishery Resources and Exploitation Division.
CB	Lists of periodicals, special sections of "Current Bibliography for Aquatic Sciences and Fisheries," special bibliographies and papers concerning documentation problems.
MFS	Provisional editions of "FAO Manuals in Fisheries Science."

Some documents also have another identification, if, for example, they have been contributed to a meeting for which papers have been numbered according to another system.

Des catégories spéciales de documents techniques sont identifiées à l'aide des symboles suivants:

RE	Listes indexées d'experts et institutions tirées des registres tenus à jour par la Division des ressources et de l'exploitation des pêches.
CB	Listes de périodiques, des sections spéciales de la « Current Bibliography for Aquatic Sciences and Fisheries », des bibliographies particulières et des articles sur les problèmes de documentation.
MFS	Editions provisoires des « Manuels FAO de science halieutique ».

Il arrive que certains documents portent d'autres numéros d'identification, comme c'est le cas s'ils ont été préparés pour une réunion dont les documents ont été marqués à l'aide d'un autre système.

Grupos especiales de documentos técnicos se identifican por las siglas siguientes:

RE	Listas índices de expertos y de instituciones tomadas de los registros que se llevan en la Dirección de Recursos Pesqueros y Explotación.
CB	Listas de periódicos, secciones especiales de la « Current Bibliography for Aquatic Sciences and Fisheries », bibliografías especiales y trabajos relativos a los problemas de documentación.
MFS	Ediciones provisionales de los « Manuales de la FAO de Ciencias Pesqueras ».

Algunos documentos tienen también otra identificación si, por ejemplo, son contribuciones a una reunión cuyos documentos han sido marcados con arreglo a otros sistemas.

FAO Fisheries Technical Paper No. 85
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DIRECTORY OF FISH CULTURE RESEARCH INSTITUTIONS

Prepared by

Fish Culture Section
Inland Fishery Branch
Fishery Resources and Exploitation Division
Department of Fisheries

FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS
Rome, February 1969

PREPARATION OF THIS PAPER

This Directory, which is a revision of the original draft issued as FAO Fisheries Circular No.24 in 1966, has been prepared in response to a recommendation of the FAO World Symposium on Warm-water Pond Fish Culture, held in Rome, 18-25 May 1966. It lists only those institutions with a continuing programme of research related to the culture of fish and other aquatic organisms.

The present Directory consists of two parts. In the first part the institutions are listed by their original language titles and in the alphabetic order of the country names. A 5-digit entry number has been allocated to each institution to make an area classification and, within that, easy retrieval of the institution. The first 3 digits of the code refer to the area code used for indexing entires to Current Bibliography for Aquatic Sciences and Fisheries (Curr.Biblphy aquat.Sci.Fish.). The last 2 digits designate the institution within a given country code. The second part of the Directory gives the titles of the institutions in the original language followed by the English language title (the original language titles for U.S.S.R. institutions were not available to the compilers at the time of preparation of this Directory and have therefore been omitted from the present version). In this part of the Directory the institutions are given in the order of code numbers - namely, continents, broad area divisions, and countries within the area divisions. The location, postal address, name of officer in charge, scientific employees, physical facilities, research programmes, and periodicals in which the institutions publish their scientific papers are listed in that order.

Distribution:

FAO Department of Fisheries
FAO Regional Fisheries Officers
International Organizations
Institutions Listed
Selector SI of the Group 84

"Current Bibliography" entry

FAO. Department of Fisheries. 15-1F003
Fishery Resources and Exploitation Division. Inland Fishery Branch. Fish Culture Section (1969)
FAO Fish.tech.Pap., (85):120 p.
Directory of fish culture research institutions

Research institutions - biological. Fish culture. Fish ponds. Scientific personnel.

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DIRECTORY OF FISH CULTURE INSTITUTIONS	unpaged

INTRODUCTION

A Draft List of Fish Culture Research Institutions was issued by this Organization as FAO Fisheries Circular No.24 in 1966. This list was used as a reference document for discussions on coordination of research in the FAO World Symposium on Warm-water Pond Fish Culture held in Rome, 18-25 May 1966. The Symposium, recognizing the value of a compilation of information on institutions and their research programmes, recommended that the draft list be developed into a complete directory and suggested that it be revised at regular intervals. This Directory has been prepared in compliance with that recommendation. Proformae were sent to all the institutions in the draft list, as well as to others that were reported to have interest in fish culture research, for collecting detailed information about them. The data thus collected have been used for this compilation.

In view of the very large number of fish culture experimental stations maintained in some countries, which are actually engaged only in routine analyses and tests, there was some difficulty in selecting institutions to be included in the Directory. Based on the information available to the compilers, it was decided that only institutions that have a continuing programme of research related to the culture of fish and other aquatic organisms should be included. The institutions listed are solely or partly engaged in fish culture investigations. The problems of current and future research summarized in the Directory do not in every case represent the full work programmes of the institutions, as investigations that are not directly connected with aquiculture have been omitted. Similarly, the equipment and facilities described are only those mainly meant for fish culture work in the institutions. As is obvious, the listed periodicals in which the results of research carried out by the institutions are published indicate only the major media used by the institutions.

The identity of species on which some of the institutions are working could not be determined correctly, as often only popular names, sometimes of genera only, were furnished. Their scientific equivalents, as far as we can ascertain, are given below:

Black bass (Largemouth bass)	:	*Micropterus salmoides*
Smallmouth bass	:	*Micropterus dolomieui*
Bluegill	:	*Lepomis macrochirus*
Carp	:	*Cyprinus carpio*
Channel catfish	:	*Ictalurus punctatus*
Chinese carps		
Grass carp	:	*Ctenopharyngodon idella*
Silver carp	:	*Hypophthalmichthys molitrix*
Bighead	:	*Aristichthys nobilis*
Indian (major) carps	:	*Catla catla* *Labeo rohita* *Cirrhina mrigala*
Cod	:	*Gadus morhua*
Eel	:	*Anguilla japonica*

Flatfish		
Plaice	:	*Pleuronectes platessa*
Sole	:	*Solea solea*
(Giant) fresh-water prawn	:	*Macrobrachium rosenbergii*
Gourami	:	*Osphronemus goramy*
Grey mullets	:	*Mugil cephalus*
(mullets)		*M. saliens*
		M. capito
		Mugil spp.
Lobster	:	*Homarus vulgaris*
Milkfish	:	*Chanos chanos*
Pike (Northern pike)	:	*Esox lucius*
Muskellunge	:	*Esox masquinongy*
Pikeperch	:	*Stizostedion lucioperca*
Walleye	:	*Stizostedion vitreum vitreum*
Salmon	:	*Salmo* spp., *Oncorhynchus* spp.
Chinook salmon	:	*Oncorhynchus tshawytscha*
Kokanee salmon	:	*Oncorhynchus nerka*
Pacific salmon	:	*Oncorhynchus* spp.
Atlantic salmon	:	*Salmo salar*
Tilapia	:	*Tilapia* spp.
Trout	:	*Salmo* spp., *Salvelinus* spp.
Rainbow trout	:	*Salmo gairdneri*
Brook trout	:	*Salvelinus fontinalis*
Lake trout	:	*Salvelinus namaycush*
Sea trout	:	*Salmo trutta*

The Directory is issued in loose-leaf form to facilitate future corrections and additions. The officers-in-charge are requested to promptly bring to the attention of the Fish Culture Section, Inland Fishery Branch, Department of Fisheries, FAO, Rome, any major changes effected in the organization or in the research programmes of their institutions, to enable necessary addenda or revisions to be issued.

INDEX OF FISH CULTURE INSTITUTIONS

Country	No.	Name of Institution
ARGENTINA	35301	Dirección de Piscicultura y Pesca Interior
AUSTRALIA	61501	Inland Fisheries Research Station Narrandera, New South Wales State Fisheries Branch, Chief Secretary's Department
AUSTRIA	56301	Bundesinstitut für Gewässerforschung und Fischereiwirtschaft
	02	Institut für Fischkunde, Tierärztliche Hochschule, Wien
BELGIUM	52201	Centre de Pisciculture Experimentale de la Fondation Hoover pour le Développement de l'Université de Louvain
	02	Station de Recherches des Eaux et Forêts, Section d'Hydrobiologie
BRAZIL	35101	Estaçao Experimental de Biologia e Piscicultura
BULGARIA	55401	Stanzia Po Sladkovodno Ribarstvo
	02	Vysshi Selskostopanski Institut "Georgii Dimitrov", Zootekhichki Fakultet
CANADA	21401	Fisheries Section, Research Branch, Department of Lands and Forests
	02	Department of Zoology, University of Guelph
CHILE	34301	Sección Biológica, Departamento de Pesca y Caza
CHINA, REPUBLIC OF (TAIWAN)	45301	Taiwan Fisheries Research Institute
	02	The Institute of Fishery Biology, National Taiwan University
COLOMBIA	33101	Centro de Experimentación Piscícola, Facultad de Veterinaria, Universidad de Caldas

(cont.)

Country	No.	Name of Institution
CZECHOSLOVAKIA	57301	Biologická Stanice Vysoké Školy Zemědělske v Brně
	02	Katedra Rybářství a Hydrobiologie, Vysoké Školy Zemědělské v Brně
	03	Výskumný Ústav Rybářsky
DENMARK	51101	Dansk Forsøgsdamkultur
FRANCE	52401	Direction des Recherches sur les Pêches Continentales, Centre Technique Forestier Tropical
GERMANY, EASTERN	57101	Institut für Binnenfischerei, Zweigstelle für Karpfenteichwirtschaft, Deutsche Akademie der Landwirtschaftswissenschaften zu Berlin
GERMANY, FEDERAL REPUBLIC OF	56101	Bayerische Biologische Versuchsanstalt
	02	Bayerische Landesanstalt für Fischerei
	03	Landesanstalt für Fischerei, Nordrhein-Westfalen
	04	Staatl. Lehr- und Versuchsanstalt für Fischerei in Starnberg
	05	Zoologischen Institut der Universität, Erlangen
HUNGARY	57401	József Attila Tudományegyetem Növényélettani Intézet, Szeged
	02	Kisállattenyésztesi Kutató Intézet, Haltenyesztési Osztály
	03	Kiserleti Halastavak
	04	Kossuth Lajos Tudományegyetem Allattani Tanszéke
	05	Országos Mezögazdasági Minöségvizsgáló Intézet (OMMI), Hidrobiológiai Osztálya
INDIA	42301	Central Inland Fisheries Research Institute
	02	Department of Biometry, Indian Statistical Institute , West Bengal
	03	Fresh-water Biological Research Station, Department of Fisheries, Madras State
	04	Fresh-water Fisheries Research Station, Directorate of Fisheries, West Bengal
INDONESIA	43401	Lembaga Penelitian Perikanan Darat

(cont.)

Country	No.	Name of Institution
ISLE OF MAN	53201	New Hatchery, White Fish Authority, Ministry of Agriculture, Fisheries and Food
	02	Marine Biological Station, University of Liverpool
ISRAEL	41301	Hamaabada Lemachalot Dagim
	02	Hatachana Lecheker Hamidgeh
ITALY	54301	Istituto di Idrobiologia e Pescicoltura dell' Università di Perugia
IVORY COAST	14101	Section de Recherches Piscicoles, Centre Technique Forestier Tropical
JAPAN	45101	Fisheries Laboratory, University of Tokyo.
	02	Freshwater Fisheries Research Laboratory
	03	Hokkaido Fish Hatchery, Hokkaido Government
	04	Hokkaido Salmon Hatchery, Fisheries Agency
	05	The Tokai Regional Fisheries Research Laboratory
	06	Tokyo University of Fisheries
MADAGASCAR	15601	Centre Technique Forestier Tropical
MALAYSIA	43301	Pusat Penyelidekan Memelihara Ikan 2 Hawa Panas
	02	Pusat Penyelidekan Perikanan
MOROCCO	11301	Section de la Chasse et de le Pêche, Ministère de l'Agriculture
NETHERLANDS	52101	Organisatie ter Verbetering van de Binnenvisserij
NORWAY	51401	Statens Biologiske Stasjon Flødevigen
	02	Trondheim Biologiske Stasjon, Det Kongelige Norske Videnskabers Selskab Museet
PHILIPPINES	43701	Brackishwater Fish Culture Section, Estuarine Fisheries Division, Philippine Fisheries Commission
	02	Department of Inland Fisheries, College of Fisheries, University of the Philippines

(cont.)

Country	No.	Name of Institution
PHILIPPINES (cont.)	43703	Fish Culture Department, College of Fisheries, Mindanao State University
	04	Freshwater Fish Culture Section, Freshwater Fisheries Division, Philippine Fisheries Commission
POLAND	57201	Instytut Zootechniki, Zaklad Biologii i Hodowli Ryb
	02	Katedra Rybactwa, Szkoly Głównej Gospodarstwa Wiejkiego w Warszawie
	03	Polska Akademia Nauk, Zaklad Biologii Wód
	04	Ter. Pracownia Rzecrna, Instytut Rybactwa Sródladowego (IRS)
	05	Wyzsza Szkola Rolnicza, Katedra Rybactwa
	06	Zaklad Gospodarki Stawowej, Instytut Rybactwa Sródladowego
	07	Zaklad Limnologii i Rybactwa, Wyzszej Szkoly Rolniczej we Wroclawiu
RHODESIA	15701	Henderson Research Station, Fisheries Research Centre
SENEGAL	14101	Division des Recherches Piscicoles, Section du Sénégal, Centre Technique Forestier Tropical
SOUTH AFRICA	15401	Division of Inland Fisheries, Department of Nature Conservation
	02	Fisheries Laboratory, Game and Fish Preservation Board, Natal Parks
	03	Lowveld Fisheries Research Station
SUDAN	12301	Inland Fisheries Research Institute, Game and Fisheries Department
SWEDEN	51601	Laxforskningsinstitutet
THAILAND	43201	Bangkhen Inland Fisheries Station
	02	Department of Aquiculture, College of Fisheries, Kasetsart University
	03	Klongwan Brackish-water Fisheries Station
UGANDA	13201	Kajansi Experimental Station, Uganda Fisheries Department

(cont.)

Country	No.	Name of Institution
UNION OF SOVIET SOCIALIST REPUBLICS	74001	Byelorussian Fisheries Research Institute (BelNIIRKh)
	78001	Kazakhstan Fisheries Research Institute (KazNIIRKh)
	71001	Krasnodar Division, Research Institute of Pond Culture (KrasNIIRKh)
	02	Siberian Fisheries Research Institute (SibNIIRKh)
	03	State Research Institute of Lake and River Fisheries (GosNIORKh)
	04	The All-Union Institute of Pond Fisheries (VNIIPRH)
	75101	Ukrainian Fisheries Research Institute (UkrNIIRKh)
UNITED ARAB REPUBLIC	12201	Fish Culture Division, Institute of Oceanography and Fisheries
	02	Fish Culture Research Section
UNITED STATES OF AMERICA	23801	Bears Bluff Laboratories
	23701	Benner Spring Fish Research Station
	23101	College of Fisheries and Fisheries Research Institute, University of Washington
	02	Department of Fisheries and Wildlife, Oregon State University
	23401	Eastern Fish Disease Laboratory, Bureau of Sport Fisheries and Wildlife, Fish and Wildlife Service, U.S. Department of the Interior
	23702	Eastern Fish Nutrition Laboratory, Bureau of Sport Fisheries and Wildlife, Fish and Wildlife Service, U.S. Department of the Interior
	23501	Farm Ponds Division, Auburn University Agricultural Experiment Station
	23402	Fish Disease Unit, Grayling Research Station, Michigan Department of Conservation, Research and Development Division
	03	Iowa Cooperative Fishery Unit, Department of Zoology and Entomology, Iowa State University
	23601	Massachusetts Division of Fisheries and Game
	23404	Missouri Cooperative Fishery Unit, University of Missouri

(cont.)

Country	No.	Name of Institution
UNITED STATES OF AMERICA (cont.)	23103	Salmon-Cultural Laboratory, Bureau of Sport Fisheries and Wildlife, Fish and Wildlife Service, U.S. Department of the Interior
	66001	The Oceanic Institute
	23405	Tuttle Creek Fisheries Research Laboratory, Kansas State University
	23502	Warm-water Fish Cultural Laboratories, Fish Farming Experimental Station, Bureau of Sport Fisheries and Wildlife, Fish and Wildlife Service, U.S. Department of the Interior
	23104	Western Fish Disease Laboratory, Bureau of Sport Fisheries and Wildlife, Fish and Wildlife Service, U.S. Department of the Interior
	23105	Western Fish Nutrition Laboratory, Bureau of Sport Fisheries and Wildlife, Fish and Wildlife Service, U.S. Department of the Interior
YUGOSLAVIA	55101	Institut za Slatkovodno Ribarstvo
	02	Zavod za Biologiju i Patologiju Riba i Pcela Veterinarskog Fakulteta
	03	Zavod za Ribarstvo
	04	Zavod za Ribarstvo na SRM

MOROCCO
11301

SECTION DE LA CHASSE ET DE LA PECHE, MINISTERE DE L'AGRICULTURE
(Section of Game and Fish, Ministry of Agriculture)

Location	:	Rabat.
Postal Address	:	Administration des eaux et forêts et de la conservation des sols, Rabat, Morocco.
Name and Designation of Officer-in-Charge	:	Maurice Chapuis, Ingénieur principal des eaux et forêts, Chef de la chasse et de la pêche.
Number of Scientists Employed	:	4 (3 also working at the Azrou Fishery Station).
Physical Facilities	:	
Current Research Programmes	:	Development of pike culture; culture of perch, pike-perch and black bass.
Future Research Programmes	:	Continuation of current work.
Training Facilities	:	
Publications in	:	Section Reports; Annual Bulletin on Fishing and Fish Culture.

MAAHAD ELOOM EL BEHAR WA EL MASSAYED - ISKINDIRIA
(Fish Culture Division, Institute of Oceanography and Fisheries, Alexandria)

Location	:	Headquarters in Barrage, Cairo; fish farms at Barrage (Cairo), El Serow, El Max, El Manzalah.
Postal Address	:	Barrage, Cairo, Egypt, United Arab Republic.
Name and Designation of Officer-in-Charge	:	A.R. El Bolock, Chief, Fish Culture Division.
Number of Scientists Employed	:	5.
Physical Facilities	:	Fish farms ranging from 2 to 200 ha; laboratories.
Current Research Programmes	:	Culture of carp, catfishes (Clarias spp.) and grey mullets; experiments in ricefield fish culture.
Future Research Programmes	:	Breeding of other fish species.
Training Facilities	:	
Publications In	:	Notes and Memoires of the Institute of Oceanography and Fisheries.

FISH CULTURE RESEARCH SECTION

Location	:	El Kanatir El Khairia.
Address	:	El Kanatir El Khairia, Egypt, United Arab Republic.
Name and Designation of Officer-in-Charge	:	A.R. El Bolock, Director.
Number of Scientists Employed	:	5.
Physical Facilities	:	Three laboratories; experimental fish ponds; experimental aquarium; motor boat.
Current Research Programmes	:	Acclimatization of exotic fishes, including Chinese carps; breeding, feeding and production experiments; ricefield fish culture; fish culture in reservoirs.
Future Research Programmes	:	Continuation of current programmes; genetics; diseases.
Training Facilities	:	
Publications In	:	Notes and Memoires, Institute of Hydrobiology and Fisheries, Alexandria.

SUDAN
12301

INLAND FISHERIES RESEARCH INSTITUTE, GAME AND FISHERIES DEPARTMENT

Location	:	Khartoum.
Postal Address	:	P.O. Box 336, Khartoum, Sudan.
Name and Designation of Officer-in-Charge	:	Dr. Y.I. Medeni.
Number of Scientists Employed	:	4.
Physical Facilities	:	Small laboratory; eight large ponds, 12 small ponds and six hatchery ponds with pumped water supply.
Current Research Programmes	:	Pond culture of food fishes.
Future Research Programmes	:	
Training Facilities	:	
Publications In	:	Hydrobiologia.

UGANDA
13201

KAJANSI EXPERIMENTAL STATION, UGANDA FISHERIES DEPARTMENT

Location	:	Kampala.
Postal Address	:	P.O. Box 530, Kampala, Uganda.
Name and Designation of Officer-in-Charge	:	E.S. Kanyike, Fish Farming Officer.
Number of Scientists Employed	:	1.
Physical Facilities	:	75 ponds (0.1 - 1.6 ha); small boats and outboard motors.
Current Research Programmes	:	Studies on pond culture of tilapia, common carp and Nile perch (Lates); hybridization and selection of cultivated species; testing suitability of indigenous species for pond culture; feeding and fertilization experiments.
Future Research Programmes	:	Continuation of current programmes.
Training Facilities	:	
Publications In	:	

SECTION DE RECHERCHES PISCICOLES, CENTRE TECHNIQUE FORESTIER TROPICAL
(Section of Fisheries Research, Technical Centre of Tropical Forestry)

Location	:	Bouaké.
Postal Address	:	B.P. 695, Bouaké, Ivory Coast.
Name and Designation of Officer-in-Charge	:	P. Lessent, Principal Inspector of the Overseas Waters and Forests.
Number of Scientists Employed	:	2.
Physical Facilities	:	76 experimental ponds; hydrobiology laboratory.
Current Research Programmes	:	Research on Tilapia, including mass selection and hybridization; growth and reproduction of Heterotis niloticus in ponds; fertilization of ponds; management of impounded waters; experimental fishing and stocking.
Future Research Programmes	:	Studies on primary productivity of artificial impounded waters and lagoons.
Training Facilities	:	Facilities to train intermediate level personnel in inland fisheries.
Publications In	:	Notes et documents sur la pêche et la pisciculture; Bois et forêts des tropiques (chroniques piscicoles); Rapports spéciaux.

NOTE: See also under France - 52401, Madagascar - 15601 and Sénégal - 14101

DIVISION DES RECHERCHES PISCICOLES, SECTION DU SENEGAL, CENTRE TECHNIQUE FORESTIER TROPICAL
(Division of Fisheries Research, Section of Sénégal, Technical Centre of Tropical Forestry)

Location	:	Résidence Faidherbe, Richard-Toll.
Postal Address	:	B.P. 28, Richard-Toll, Sénégal.
Name and Designation of Officer-in-Charge	:	C. Reizer, Divisional Chief.
Number of Scientists Employed	:	1.
Physical Facilities	:	Laboratory; offices; library.
Current Research Programmes	:	Study of fish culture possibilities of the lower and middle courses of the Sénégal River, including the group Tawe-Lac de Guiers and the flood zone.
Future Research Programmes	:	
Training Facilities	:	
Publications In	:	Bois et forêts des tropiques, Nogent-sur-Marne; Notes et documents sur la pêche et la pisciculture, Nogent-sur-Marne; Publications apériodiques du C.T.F.T.; Bulletin mensuel d'information du C.T.F.T., Sénégal.

NOTE: See also under France - 52401, Ivory Coast - 14101 and Madagascar - 15601

AFDELING BINNELANDSE VISSERYE, DEPARTMENT VAN NATUURBEWARING
(Division of Inland Fisheries, Department of Nature Conservation)

Location	:	Jonkershoek, Stellenbosch.
Postal Address	:	Private Bag 5014, Stellenbosch, Republic of South Africa.
Name and Designation of Officer-in-Charge	:	G.F. van Wyk, Senior Fisheries Officer.
Number of Scientists Employed	:	3.
Physical Facilities	:	Ponds for fish culture; smaller ponds for limited research work; laboratory.
Current Research Programmes	:	Culture of trout, tilapia, carp, etc.
Future Research Programmes	:	Continuation of current programme.
Training Facilities	:	
Publications In	:	Annual Report and Technical Papers of the Department of Nature Conservation.

FISHERIES LABORATORY, GAME AND FISH PRESERVATION BOARD, NATAL PARKS

Location	:	Queen Elizabeth Park, Pietermaritzburg.
Postal Address	:	P.O. Box 662, Pietermaritzburg, Natal, South Africa.
Name and Designation of Officer-in-Charge	:	R.S. Crass, Senior Research Officer.
Number of Scientists Employed	:	3 (one employed on fish culture experiments).
Physical Facilities	:	Laboratory and aquaria at Queen Elizabeth Park; 34 ponds up to 0.4 ha in area and concrete tanks at Umgeni Hatchery.
Current Research Programmes	:	Culture of Tilapia mossambica and T. melanopleura; growth, feeding and productivity studies.
Future Research Programmes	:	Continuation of current programmes.
Training Facilities	:	
Publications In	:	Annual Report, and other publications of the Natal Parks, Game and Fish Preservation Board.

LAEVELDSE VISSERYNAVORSINGSTASIE
(Lowveld Fisheries Research Station)

Location	:	120 miles north west of Pretoria.
Postal Address	:	Private Bag Nature Conservation, Marble Hall, Northern Transvaal, Republic of South Africa.
Name and Designation of Officer-in-Charge	:	Dr. G.L. Lombard, Chief Professional Officer.
Number of Scientists Employed	:	2.
Physical Facilities	:	About 100 outdoor ponds.
Current Research Programmes	:	Production in ponds; dietetic and parasitological studies on the genera, Tilapia, Clarias, Cyprinus and Micropterus.
Future Research Programmes	:	Continuation of current programmes.
Training Facilities	:	
Publications In	:	Proceedings of the American Fisheries Society; Fauna and Flora.

CENTRE TECHNIQUE FORESTIER TROPICAL
(Technical Centre of Tropical Forestry)

Location	:	Laboratory in Quartier d'Ambatoba, Tananarive; fish culture research stations in Perinet and Ampamaherana.
Postal Address	:	Boîte Postale 904, Tananarive, Madagascar.
Name and Designation of Officer-in-Charge	:	J.L. Moulherat.
Number of Scientists Employed	:	2.
Physical Facilities	:	Small office-laboratory; two research field stations; survey team with boats.
Current Research Programmes	:	At stations: research on the culture of carp; rice field fish culture; Tilapia monosex culture; intermittent cropping and rice field fish culture; Heterotis acclimatization and trial culture in the highlands.
Future Research Programmes	:	More intensive studies on Tilapia; if acclimatization of Heterotis is successful, selection and pond fertilization to be undertaken.
Training Facilities	:	Science Faculty of Tananarive University.
Publications In	:	Bois et forêts des tropiques (CTFT); Bulletin français de pisciculture; Bulletin de Madagascar; Bulletin Académie Malgache; Bulletin du Muséum; Revue forestiére française.

NOTE : See also under France - 52401, Ivory Coast - 14101 and Sénégal - 14101

RHODESIA
15701

HENDERSON RESEARCH STATION, FISHERIES RESEARCH CENTRE

Location	:	Mazoe, near Salisbury.
Postal Address	:	Ministry of Agriculture, P. Bag 222A, Salisbury, Rhodesia.
Name and Designation of Officer-in-Charge	:	M.I. van der Lingen, Senior Research Officer (Fisheries).
Number of Scientists Employed	:	2.
Physical Facilities	:	Well-equipped laboratories; small workshop; indoor aquarium tanks; small boats and motor; 12 ha reservoir; 16 ha of ponds and adjoining 400 ha impoundment.
Current Research Programmes	:	Biology of cultivable species; limnology of impounded waters; pond production of tilapia; pond fertilization.
Future Research Programmes	:	Investigation of suitable species for pond and dam culture; productivity of impounded waters; ecological studies on fish populations.
Training Facilities	:	Practical instruction and occasional courses.
Publications In	:	Rhodesia Agricultural Journal; Hydrobiologia.

CANADA
21401

DEPARTMENT OF LANDS AND FORESTS, RESEARCH BRANCH, FISHERIES SECTION

Location	:	Maple, Ontario.
Postal Address	:	Maple, Ontario, Canada.
Name and Designation of Officer-in-Charge	:	K.H. Loftus, Supervisor.
Number of Scientists Employed	:	24.
Physical Facilities	:	Four field stations operating year-round on Great Lakes; laboratory of experimental limnology; two field stations operating April-November; Headquarters station.
Current Research Programmes	:	Limnology; parasitology; productivity; selective breeding, particularly of game fishes (lake trout, brook trout, smallmouth bass, walleye and kokanee).
Future Research Programmes	:	Pollution; physiology; rainbow trout; muskellunge; farm ponds.
Training Facilities	:	Limited facilities available - on the job training possible.
Publications In	:	Journal of the Fisheries Research Board of Canada; Transactions of the American Fisheries Society; Copeia; Canadian Journal of Zoology; Canadian Fish Culturist; The Progressive Fish-Culturist; Limnology and Oceanography; Journal of Wildlife Management.

DEPARTMENT OF ZOOLOGY, UNIVERSITY OF GUELPH

Location	:	Ontario.
Postal Address	:	Ontario, Canada
Name and Designation of Officer-in-Charge	:	Professor K. Ronald, Head of Department
Number of Scientists Employed	:	22.
Physical Facilities	:	Aquaria (fresh-water and marine); full laboratory facilities for culture, growth studies, physiological investigations and experiments in disease control.
Current Research Programmes	:	Biology of trout and carp.
Future Research Programmes	:	Continuation of current programmes.
Training Facilities	:	Undergraduate and post-graduate courses in fisheries or marine biology; no specialized courses in fish culture.
Publications In	:	Transactions of the American Fisheries Society; Canadian Journal of Zoology; Journal of the Fisheries Research Board of Canada; Nature; Journal of the American Society of Parasitologists.

UNITED STATES OF AMERICA
23101

COLLEGE OF FISHERIES AND FISHERIES RESEARCH INSTITUTE, UNIVERSITY OF WASHINGTON

Location	:	Seattle, Washington.
Postal Address	:	Seattle, Washington 98105, U.S.A.
Name and Designation of Officers-in-Charge	:	Dr. Richard Van Cleve, Dean of College of Fisheries; Dr. William F. Royce, Director of Fisheries Research Institute.
Number of Scientists Employed	:	About 25 faculty and 100 graduate students.
Physical Facilities	:	Ponds and troughs for hatching and rearing trout and salmon; central laboratories for behavioural, physiological, chemical and pathological analysis of fish and shellfish.
Current Research Programmes	:	Genetics of trout and Pacific salmon; growth and diseases of molluscs.
Future Research Programmes	:	Continuation of current programmes.
Training Facilities	:	Part of modern university with total student body of about 25,000. Training programmes can be developed for undergraduates, graduates, post-doctorals, and special continuing educational programmes in fisheries and related fields.
Publications In	:	Transactions of the American Fisheries Society; Bulletins and Special Scientific Reports (U.S. Fish and Wildlife Service); University of Washington Publications in Fisheries; Journal of the Fisheries Research Board of Canada.

DEPARTMENT OF FISHERIES AND WILDLIFE, OREGON STATE UNIVERSITY

Location	:	Corvallis, Oregon.
Postal Address	:	315 Extension Hall, Corvallis, Oregon 97331, U.S.A.
Name and Designation of Officer-in-Charge	:	Dr. Thomas G. Scott, Head.
Number of Scientists Employed	:	23.
Physical Facilities	:	Marine Science Centre, Newport, Oregon, with facilities for culturing fresh-water and marine invertebrates; Port Orford Research Laboratory with facilities for experimental rearing of chinook salmon; Oak Creek Research Laboratory with facilities for rearing and experimenting with warm- and cold-water fishes.
Current Research Programmes	:	Mollusc culture (artificial propagation of oysters and clams); culture of crabs; ecology of fall chinook salmon (testing the adaptability of fall chinook salmon for immediate migration or transfer to salt-water rearing facilities); bioenergetics of fishes (testing energy webs of young fishes in an artificial environment).
Future Research Programmes	:	Actively seeking to establish a fish cultural station for the establishment of a run of anadromous fishes for demonstration, genetic, pathological and general biological purposes.
Training Facilities	:	Formal university course work offered includes fish culture, biology of fishes, fishery limnology, ichthyology, economic invertebrates, commercial fisheries, parasites and diseases of fish, pollution problems in fisheries.
Publications In	:	Transactions of the American Fisheries Society; Journal of the Fisheries Research Board of Canada; Copeia; The Progressive Fish-Culturist; Journal of Wildlife Management; Technical Association of Pulp and Paper Industry (TAPPI); Ecology; Special Scientific Reports - Fisheries; Research Briefs, Fish Commission of Oregon; California Fish and Game.

SALMON-CULTURAL LABORATORY, BUREAU OF SPORT FISHERIES AND WILDLIFE, FISH AND WILDLIFE SERVICE, U.S. DEPARTMENT OF THE INTERIOR

Location	:	Longview, Washington.
Postal Address	:	1440 Abernathy Road, Longview, Washington 98632, U.S.A.
Name and Designation of Officer-in-Charge	:	Roger E. Burrows, Laboratory Director.
Number of Scientists Employed	:	6.
Physical Facilities	:	Biological and chemistry laboratory; 62 circular steel fish-rearing tanks; six concrete rectangular recirculating rearing ponds; adult salmon diversion and holding facilities; 3-million-egg-capacity vertical incubator; fish food preparation and storage equipment; water reclamation and temperature control equipment; artificial egg-incubation channel.
Current Research Programmes	:	Applied nutrition studies; evaluation of environmental factors limiting production in rearing ponds; measurement of differences in characteristics of fingerling salmon; definition of fingerling characteristics necessary for maximum adult survival; development of improved rearing facilities; evaluation of the potentialities of the Abernathy incubation channel; evaluation of stress in fingerling salmon.
Future Research Programmes	:	Continuation of current programmes.
Training Facilities	:	
Publications In	:	Research Report, and Special Scientific Report - Fisheries (U.S. Fish and Wildlife Service); Technical Papers (Bureau of Sport Fisheries and Wildlife); The Progressive Fish-Culturist.

WESTERN FISH DISEASE LABORATORY, BUREAU OF SPORT FISHERIES AND WILDLIFE, FISH AND WILDLIFE SERVICE, U.S. DEPARTMENT OF THE INTERIOR

Location	:	Seattle, Washington.
Postal Address	:	Building 204, Sand Point Naval Air Station, Seattle, Washington 98115, U.S.A.
Name and Designation of Officer-in-Charge	:	Robert R. Rucker, Director.
Number of Scientists Employed	:	6.
Physical Facilities	:	Equipped bacteriology, virology, pathology, immunopathology and chemistry laboratories; troughs; tanks; aquaria.
Current Research Programmes	:	Determination of etiologic agents and the prevention and treatment of communicable fish diseases.
Future Research Programmes	:	Extension of current research to fish in the marine environment.
Training Facilities	:	
Publications In	:	Various American and Canadian scientific journals.

WESTERN FISH NUTRITION LABORATORY, BUREAU OF SPORT FISHERIES AND WILDLIFE, FISH AND WILDLIFE SERVICE, U.S. DEPARTMENT OF THE INTERIOR

Location	:	Willard (P.O. Cook), Washington.
Postal Address	:	Cook, Washington 98605, U.S.A.
Name and Designation of Officer-in-Charge	:	Dr. John E. Halver, Director.
Number of Scientists Employed	:	20.
Physical Facilities	:	Main research laboratory; experimental troughs; outside holding tanks; maintenance shop.
Current Research Programmes	:	Studies on fish nutrition, enzymes, hepatoma, pesticides and minerals; metabolism evaluations.
Future Research Programmes	:	Continuation of current programmes.
Training Facilities	:	
Publications In	:	The Progressive Fish-Culturist; Journal of Nutrition; Transactions of the American Fisheries Society; Archives of Biochemistry and Biophysics; General and Comparative Endocrinology.

UNITED STATES OF AMERICA
23401

EASTERN FISH DISEASE LABORATORY, BUREAU OF SPORT FISHERIES AND WILDLIFE, FISH AND WILDLIFE SERVICE, U.S. DEPARTMENT OF THE INTERIOR

Location	:	Leetown, West Virginia.
Postal Address	:	Leetown (P.O. Kearneysville), West Virginia 25430, U.S.A.
Name and Designation of Officer-in-Charge	:	S.F. Snieszko, Director.
Number of Scientists Employed	:	7.
Physical Facilities	:	Seven laboratory rooms; lecture room; laboratory for 10 students; library; three rooms for holding fish under controlled temperature.
Current Research Programmes	:	Research on fish pathology, bacteriology, parasitology, virology, histopathology and chemotherapy of fish diseases.
Future Research Programmes	:	Continuation of current programmes.
Training Facilities	:	Annually: two-week course for 15 students; Biennially: Advanced 10-month course on fish diseases, including eight hours of lectures and 12 hours of laboratory exercises for five months, and research projects for five months.
Publications In	:	In various journals.

FISH DISEASE UNIT, GRAYLING RESEARCH STATION, MICHIGAN DEPARTMENT OF CONSERVATION, RESEARCH AND DEVELOPMENT DIVISION

Location	:	Grayling, Michigan.
Postal Address	:	State Fish Hatchery, P.O. Box 507, Grayling, Michigan 49738, U.S.A.
Name and Designation of Officer-in-Charge	:	Leonard N. Allison, Fish Pathologist.
Number of Scientists Employed	:	4.
Physical Facilities	:	Raceways (divisible into at least three sections each); aquaria room; bacteriological and general laboratories; office; library and conference room.
Current Research Programmes	:	Nutrition of salmonids; biology of parasitic copepods; control of external parasites of fish by systemic therapeutics; improvement of vitality and disease resistance of Salvelinus fontinalis and Salmo trutta by genetic selection.
Future Research Programmes	:	Propagation of germ-free fish; viral survey of hatchery brood stock salmonids; life history and distribution of parasites of fish; development of new drugs for treatment of fish diseases; research in immunology among fishes.
Training Facilities	:	Adequate for two graduate students.
Publications In	:	Transactions of the American Fisheries Society; The Progressive Fish-Culturist; Science; Journal of Parasitology.

IOWA COOPERATIVE FISHERY UNIT, DEPARTMENT OF ZOOLOGY AND ENTOMOLOGY, IOWA STATE UNIVERSITY (Cooperating agencies: Iowa State University, Iowa State Conservation Commission, U.S. Bureau of Sport Fisheries and Wildlife)

Location	:	Ames, Iowa.
Postal Address	:	Science Hall, Ames, Iowa 50010, U.S.A.
Name and Designation of Officer-in-Charge	:	Robert J. Muncy, Unit Leader.
Number of Scientists Employed	:	5.
Physical Facilities	:	334 m^2 of centralized laboratory, office and storage space; teaching and research fishery collection; University library; indoor holding tanks and aquaria. Private ponds and small lakes as well as state and federal-owned hatcheries are available on cooperative agreements. Large lakes are studied in co-operation with Iowa State Conservation Commission. Research equipment of University, State and U.S. Bureau of Sport Fisheries and Wildlife readily available. Computer Centre, Veterinary Diagnostic Laboratory and Iowa Water Resources Institute represent some of the supporting facilities on campus.
Currrent Research Programmes	:	Farm pond research relates to effects of population crowding on physiological or histological parameters of fish in farm ponds; limnological conditions in relation to fish production.
Future Research Programmes	:	Continuation of current programmes.
Training Facilities	:	Iowa State University regular B.S., M.S. and Ph.D. programme in fisheries management, entomology, wildlife, zoology and many supporting programmes; extension programmes and special meetings provide additional training opportunities.
Publications In	:	Proceedings of Iowa Academy of Science; Iowa State Journal of Science; Transactions of the American Fisheries Society; Journal of Wildlife Management; Iowa Conservationist; Midwest Wildlife Conference; Ecology; The Progressive Fish-Culturist; Transactions of North American Wildlife Conference; Quarterly and Annual Reports of the Iowa Unit.

MISSOURI COOPERATIVE FISHERY UNIT, UNIVERSITY OF MISSOURI

Location	:	Columbia, Missouri.
Postal Address	:	Stephens Hall, Columbia, Missouri 65201, U.S.A.
Name and Designation of Officer-in-Charge	:	Richard Anderson, Unit Leader.
Number of Scientists Employed	:	4.
Physical Facilities	:	Laboratories and museum; staff and student offices; aquarium room; ponds and reservoirs in vicinity.
Current Research Programmes	:	Factors influencing bioenergetics and growth of fishes; community metabolism, population dynamics; production studies; pond management; ecology; life history of selected species.
Future Research Programmes	:	Continuation of current programmes.
Training Facilities	:	
Publications In	:	

TUTTLE CREEK FISHERIES RESEARCH LABORATORY, KANSAS STATE UNIVERSITY

Location	:	Manhattan, Kansas.
Postal Address	:	Division of Biology, Manhattan, Kansas 66502, U.S.A.
Name and Designation of Officer-in-Charge	:	Otto W. Tiemeier, Professor of Zoology.
Number of Scientists Employed	:	3.
Physical Facilities	:	28 (0.1 ha) plastic-lined ponds and one observation pond; laboratory building; milling facilities of the Department of Grain Science and Industry.
Current Research Programmes	:	Effects of various temperatures on secretion of digestive enzymes; effects of temperature on rate of digestion; food habits of channel catfish fry; an evaluation of brewer's dried grains as food for channel catfish; comparison of growth with sinking versus floating pelleted feeds; substitution of plant proteins for animal proteins in feeds.
Future Research Programmes	:	Effects of temperature and light on spawning of channel catfish; observations on behaviour of channel catfish; evaluation of fish and fisheries waste products as food for animals; effects of various feeding regimes on certain blood components.
Training Facilities	:	Places for six graduate research students.
Publications In	:	The Progressive Fish-Culturist; Transactions of the Kansas Academy of Science; The Southwestern Naturalist; Kansas State University, Agricultural Experiment Station Bulletins; Feedstuffs.

UNITED STATES OF AMERICA
23501

FARM PONDS DIVISION, AUBURN UNIVERSITY AGRICULTURAL EXPERIMENT STATION

Location	:	Auburn, Alabama.
Postal Address	:	Fisheries Building, Auburn University, Auburn, Alabama 36830, U.S.A.
Name and Designation of Officer-in-Charge	:	Dr. H.S. Swingle, Professor.
Number of Scientists Employed	:	10.
Physical Facilities	:	Fisheries building; ponds; chemical, limnology and nutrition laboratories; class rooms.
Current Research Programmes	:	Commercial fish production; fish physiology and nutrition; aquatic weed control; limnology; fish parasites and diseases; sport fishing management; fish population dynamics.
Future Research Programmes	:	Continuation of current programmes.
Training Facilities	:	Courses leading to B.S., M.S. and Ph.D. in Fisheries.
Publications In	:	Transactions of the American Fisheries Society; The Progressive Fish Culturist; Station publications.

WARM-WATER FISH CULTURAL LABORATORIES, BUREAU OF SPORT FISHERIES AND WILDLIFE, FISH AND WILDLIFE SERVICE, U.S. DEPARTMENT OF THE INTERIOR

Location	:	Headquarters in: Stuttgart, Arkansas; Laboratories also in Marion, Alabama and Kelso, Arkansas.
Postal Address	:	Headquarters: P.O. Box 860, Stuttgart, Arkansas 72160, U.S.A.
Name and Designation of Officer-in-Charge	:	Kermit E. Sneed, Director.
Number of Scientists Employed	:	12.
Physical Facilities	:	929 m^2 laboratory space, plus allied buildings; 120 ponds and reservoirs; fish holding house and aquarium room with 100 aquaria.
Current Research Programmes	:	Control of diseases and parasites of warm-water fishes; reproduction and production of food fishes, especially the catfishes (Ictalurus); nutrition of catfishes, both basic and applied; limnology of small and large impoundments for fish culture; studies on induced spawning.
Future Research Programmes	:	Continuation of current programmes, and research on rice-fish-soybean rotation and economics of food fish farming.
Training Facilities	:	Two-week course each year in fish diseases for professional biologists.
Publications In	:	Department of Interior journals.

UNITED STATES OF AMERICA
23601

MASSACHUSETTS DIVISION OF FISHERIES AND GAME

Location	:	Westboro, Massachusetts.
Postal Address	:	Field Headquarters: Westboro, Massachusetts 01581, U.S.A.
Name and Designation of Officer-in-Charge	:	William A. Tompkins, Chief Aquatic Biologist.
Number of Scientists Employed	:	5.
Physical Facilities	:	Library; running sea and fresh water; large outdoor pond and tanks and small aquarium tanks; chemical laboratory; machine and wood shop; small boats and outboard motors.
Current Research Programmes	:	Harvest studies on managed ponds; effect of water chemistry on fish survival; warm-water fisheries and trout investigations.
Future Research Programmes	:	Use of alewives as trout forage; development of channel catfish fishery; establishment of walleye and northern pike.
Training Facilities	:	
Publications In	:	Transactions of the American Fisheries Society; Transactions of Limnology and Oceanography; The Progressive Fish-Culturist.

UNITED STATES OF AMERICA
23701

BENNER SPRING FISH RESEARCH STATION

Location	:	Bellefonte, Pennsylvania.
Postal Address	:	Box 200-C, R.D. No.1, Bellefonte, Pennsylvania 16823, U.S.A.
Name and Designation of Officer-in-Charge	:	Keen Buss, Chief Aquatic Biologist.
Number of Scientists Employed	:	6 professionals; 14 technicians.
Physical Facilities	:	Three laboratories; small library; research collection of fresh-water fish; hatching facilities; small aquaria; 150 experimental concrete ponds, raceways and earthen ponds for trout; numerous large ponds for warm-water fish species; machine and wood shop; small boats and outboard motors.
Current Research Programmes	:	Research in fishery management and fish culture, including blood group studies; immunogenetics in fishes; selective breeding, nutrition and mechanization in trout culture; improvements in the culture of esocids; fish disease and immunological studies; fish marking; the use of experimental electro-fishing gear.
Future Research Programmes	:	Continuation of current programmes.
Training Facilities	:	Facilities for training up to 12 candidates in fish culture and general fisheries biology.
Publications In	:	The Progressive Fish-Culturist; Transactions of the American Fisheries Society.

EASTERN FISH NUTRITION LABORATORY, BUREAU OF SPORT FISHERIES AND WILDLIFE, FISH AND WILDLIFE SERVICE, U.S. DEPARTMENT OF THE INTERIOR

Location	:	Cortland, New York.
Postal Address	:	Cortland, New York 13045, U.S.A.
Name and Designation of Officer-in-Charge	:	Dr. Arthur M. Phillips, Jr., Chief, Eastern Fish Nutrition Investigations.
Number of Scientists Employed	:	6.
Physical Facilities	:	Nutrition and physiological laboratory; radio-isotope laboratory; stamina and exercise control laboratory; two experimental tank areas; small library; in-service training school for employees of the Fish and Wildlife Service.
Current Research Programmes	:	Chemical composition of hatchery and wild trout; mineral metabolism of trout; vitamin requirement of trout; trout endocrinology; the effect of diet composition upon growth, survival and quality of hatchery trout; effect of physical factors on the growth of hatchery trout; the chemical composition of trout blood.
Future Research Programmes	:	Continuation of current programmes, and determination of values for establishing trout quality; quality standards.
Training Facilities	:	Facilities for 11 students per school year.
Publications In	:	Annual Report of The Cortland Laboratory (published by The State of New York Conservation Department, Albany, New York); The Progressive Fish-Culturist.

UNITED STATES OF AMERICA
23801

BEARS BLUFF LABORATORIES

Location	:	Wadmalaw Island, South Carolina.
Postal Address	:	Route One, Box 39, Wadmalaw Island, South Carolina 29487, U.S.A.
Name and Designation of Officer-in-Charge	:	Dr. G. Robert Lunz, Director.
Number of Scientists Employed	:	6.
Physical Facilities	:	Two research boats; four outboard motor boats; laboratory; library; office space.
Current Research Programmes	:	Culture of shrimp and fish in salt-water ponds; studies on blue crab and shrimp populations; oyster beds and residual pesticides in fish and oyster.
Future Research Programmes	:	Continuation of current programmes.
Training Facilities	:	
Publications In	:	Contributions from Bears Bluff Laboratories.

COLOMBIA
33101

CENTRO DE EXPERIMENTACIÓN PISCÍCOLA, FACULTAD DE VETERINARIA, UNIVERSIDAD DE CALDAS
(Fish Culture Experimental Centre, School of Veterinary Medicine, University of Caldas)

Location	:	University of Caldas farm, 30 km from Manizales.
Postal Address	:	Manizales, Colombia, South America.
Name and Designation of Officer-in-Charge	:	A. Ramos-Henao, Director.
Number of Scientists Employed	:	1.
Physical Facilities	:	23 ponds and two small reservoirs already built; more ponds under construction; laboratory to be constructed soon.
Current Research Programmes	:	Hybridization of Tilapia spp.; production studies with Tilapia mossambica; experiments in pond culture of selected indigenous river fishes.
Future Research Programmes	:	Basic production (yield) studies with Tilapia melanopleura, Tilapia mossambica male hybrids, mixed population of Cichla ocellaris and Tilapia mossambica; mixed population of Micropterus salmoides and Tilapia mossambica; experiments in fertilization of ponds.
Training Facilities	:	Station facilities of University can be used to train technical personnel.
Publications In	:	Veterinaria y Zootecnia (published by the School of Veterinary Medicine, University of Caldas, Manizales, Colombia).

CHILE
34301

SECCION BIOLOGICA, DEPARTAMENTO DE PESCA Y CAZA
(Biology Section, Department of Fish and Game)

Location	:	Four fish culture stations located in Rio Blanco, Curicó, Polcura and Lautaro; central laboratory for biological investigations in Santiago.
Postal Address	:	Campañia 1555, Casilla 9344 (Correo Central), Santiago, Chile.
Name and Designation of Officer-in-Charge	:	Dr. S. Basulto del Campo.
Number of Scientists Employed	:	3.
Physical Facilities	:	Stations for fish culture in Rio Blanco, Curicó, Polcura and Lautaro; central laboratory for biological studies in Santiago.
Current Research Programmes	:	Nutrition of trout in ponds; artificial propagation of cultivable fishes; acclimatization of exotic species.
Future Research Programmes	:	Continuation of current programmes; experiments in the culture of trout and fish culture in net enclosures in lakes and other water impoundments.
Training Facilities	:	
Publications In	:	Biología Pesquera (published by the Department of Fish and Game).

BRAZIL
35101

ESTAÇAO EXPERIMENTAL DE BIOLOGIA E PISCICULTURA
(Experimental Station of Biology and Fish Culture)

Location	:	Pirassununga, São Paulo.
Postal Address	:	Pirassununga, São Paulo, Brazil.
Name and Designation of Officer-in-Charge	:	Dr. F. Alzuguir, Chief.
Number of Scientists Employed	:	1.
Physical Facilities	:	Ponds; aquaria; library; lecture hall; laboratory space; residential accommodation for technicians.
Current Research Programmes	:	Studies on the propagation of Tilapia melanopleura, Micropterus salmoides, Astronotus occellatus and Cyprinus carpio.
Future Research Programmes	:	Continuation of current programmes.
Training Facilities	:	
Publications In	:	

ARGENTINA
35301

DIRECCIÓN DE PISCICULTURA Y PESCA INTERIOR
(Department of Fish Culture and Inland Fisheries)

Location	:	Central office in Buenos Aires; stations located in: (i) San Carlos de Bariloche, Rio Negro; (ii) Embalse, Córdoba; (iii) Rio Limay, Plottier, Neuquén; (iv) Sierra de la Ventana, Buenos Aires.
Postal Address	:	Paseo Colon 922, Buenos Aires, Argentina.
Name and Designation of Officer-in-Charge	:	V. Mastrarrigo, Director of Fish Culture and Inland Fisheries.
Number of Scientists Employed	:	Fish culturists: 10; Technologists: 2; Other specialists: 4.
Physical Facilities	:	San Carlos Bariloche station has facilities for rearing salmon and trout; Embalse station for rearing Basilichthys; Plottier station for rearing Percichthys; and Sierra de la Ventana for rearing Percichthys, salmon and trout.
Current Research Programmes	:	Artificial propagation of the six species cultured all over the country: four species of Salmo, one species of Basilichthys and one species of Percichthys.
Future Research Programmes	:	Intensification of production in established stations; experiments in transplantation of non-indigenous species.
Training Facilities	:	Limited facilities for in-service training in salmonid culture in San Carlos de Bariloche and in Embalse.
Publications In	:	Miscellaneous bulletins published by the Secretary of State of Agriculture and Animal Husbandry.

HAMAABADA LEMACHALOT DAGIM
(Laboratory for Fish Diseases)

Location	:	Nir-David.
Postal Address	:	Nir-David, D.N., Israel.
Name and Designation of Officer-in-Charge	:	S. Sarig, Director.
Number of Scientists Employed	:	4.
Physical Facilities	:	Laboratory for three to five workers; three constant temperature rooms; one aquaria room with 40 aquaria (50-litre); one aquarium shed with 36 aquaria (300-litre); library.
Current Research Programmes	:	Fish diseases; ecological conditions in ponds affecting fish mortalities.
Future Research Programmes	:	Continuation of current programmes.
Training Facilities	:	Class room for training of 10-15 students; two rooms for research workers.
Publications In	:	Bamidgeh.

HATACHANA LECHEKER HAMIDGEH
(Fish Culture Research Station)

Location	:	Dor
Postal Address	:	Dor, D.N. Hof Hacarmel, Israel.
Name and Designation of Officer-in-Charge	:	Dr. A. Yashouv, Director.
Number of Scientists Employed	:	7.
Physical Facilities	:	Biological and histological laboratories; aquarium room; outdoor aquarium with 50 asbestos-cement tanks (750 litres); 128 fish ponds.
Current Research Programmes	:	Carp nutrition and feeding experiments of carp; mixed culture of carp and tilapia, and carp and grey mullet; physiology of spawning related to the inducement of spawning of the grey mullets, Mugil cephalus and M. capito; the biology and culture of the grey mullets in ponds; carp genetics and selection; tilapia hybrids.
Future Research Programmes	:	Continuation of current programmes.
Training Facilities	:	
Publications In	:	Bamidgeh.

INDIA
42301

KENDRIYA ANTARSTHALIYA MATSYAKI GAVESHANA SANSTHAN
(Central Inland Fisheries Research Institute (CIFRI))

Location	:	Headquarters at Barrackpore, West Bengal.
Postal Address	:	P.O. Barrackpore, Via Calcutta, India.
Name and Designation of Officer-in-Charge	:	Dr. V.G. Jhingran, Director.
Number of Scientists Employed	:	99.
Physical Facilities	:	Extensive library; small cement tanks; experimental fish farms; boats and outboard motors; field and laboratory equipment; limited accommodation for visitors. The Institute has 13 Field Stations or Branch Laboratories, out of which the following five are mainly concerned with fish culture research:

(i) Central Inland Fisheries Research Sub-station, Pond Culture Division
19 Cantonment Road
Cuttack-1, Orissa State, India

(ii) Central Inland Fisheries Research Sub-station, Tank and Lacustrine Fisheries Division
Tunghabhadra Dam, Mysore State, India

(iii) Cold Water Fisheries Research Unit
Suraj Kund Road
Kangra, Punjab, India

(iv) Estuarine Fisheries Research Centre
Kakdwip, West Bengal, India

(v) Pond Culture Research Unit of the Central Inland Fisheries Research Institute
Jaysagar, Assam State, India.

Current Research Programmes	:	Optimum/ha production of fry, fingerlings and large fish in culture fishery operations; induced breeding of fishes; fresh-water prawn culture; prawn culture in brackish water; selective breeding and hybridization of Indian carps; exotic fish culture; weed control; frog farming.
Future Research Programmes	:	Continuation of current programmes; fish farm designing; economics of fish farming.

Training Facilities	:	One-year training course in inland fisheries with special emphasis on fish culture.
Publications In	:	Indian Journal of Fisheries; Proceedings of the Indo-Pacific Fisheries Council; Journal of the Bombay Natural History Society; Proceedings of the National Institute of Sciences, India; Current Science; Science and Culture; Proceedings of the Indian Academy of Sciences (Part B); Indian Journal of Helminthology; Proceedings of the National Academy of Sciences, India (Part B); Records of Indian Museum; Journal du Conseil.

DEPARTMENT OF BIOMETRY, INDIAN STATISTICAL INSTITUTE, WEST BENGAL

Location	:	Baranagar, 24 Parganas, West Bengal.
Postal Address	:	203 Barrackpore Trunk Road, Calcutta-35, India.
Name and Designation of Officer-in-Charge	:	Dr. B.C. Das, Professor of Biometry and Head of Department.
Number of Scientists Employed	:	6.
Physical Facilities	:	Fully-equipped research laboratory for biochemical and physiological research; six carp ponds; electronic data processing equipment (IBM 1401 computer); library (books and periodicals in statistics and biology); guest house; class rooms.
Current Research Programmes	:	Age-related biochemical, haematological and physiological changes in Indian carps; growth, survival, nutrition and biochemistry of postembryonic Indian carps; electrophoretic studies of proteins and enzymes of Indian carps.
Future Research Programmes	:	Investigations on the feasibility of carp culture in the Sunderbans using the headwaters of the Hooghly river; detailed study of biochemical factors contributing to yield defined as weight and growth per fish.
Training Facilities	:	Facilities for research leading to Ph.D. degree; specialized training in statistics, experimental design, electronic data processing, biochemistry and physiology for officers on deputation.
Publications In	:	Gerontologia; Indian Journal of Fisheries; Journal of Experimental Zoology; Proceedings of the National Institute of Sciences of India; Sankhya (Series B); Transactions of the American Fisheries Society.

FRESH-WATER BIOLOGICAL RESEARCH STATION, DEPARTMENT OF FISHERIES, MADRAS STATE

Location	:	Bhavanisagar.
Postal Address	:	Bhavanisagar Post, Via Erode, Madras State, India.
Name and Designation of Officers-in-Charge	:	A. Sreenivasan, Assistant Director of Fisheries (Hydrology); V. Ranganathan, Assistant Director of Fisheries (Fresh-water Biology).
Number of Scientists Employed	:	7.
Physical Facilities	:	Well-equipped laboratory for hydrology and biology; fish farm and experimental cisterns; library; facilities for field studies.
Current Research Programmes	:	Primary production of artificial impoundments; fish seed production; pond fish culture studies; fish pathology; fertilization; soil composition; effects of industrial pollution and insecticides on fish; bio-chemical composition of fresh-water fishes.
Future Research Programmes	:	Continuation of current programmes.
Training Facilities	:	
Publications In	:	Indian Journal of Fisheries; Proceedings of the Indian Academy of Sciences; Journal of the Bombay Natural History Society; Madras Journal of Fisheries; Journal of Marine Biological Association of India; Hydrobiologia; Internationale Revue der gesamten Hydrobiologie und Hydrographie; Archiv für Hydrobiologie; Limnology and Oceanography; Environmental Health; Ecology.

FRESH-WATER FISHERIES RESEARCH STATION, DIRECTORATE OF FISHERIES, WEST BENGAL

Location	:	Kalyani, Nadia District, West Bengal.
Postal Address	:	P.O. Kataganj, via Kancharapara, Nadia, West Bengal, India.
Name and Designation of Officer-in-Charge	:	N.K. Chowdhury, Deputy Director of Fisheries Research.
Number of Scientists Employed	:	23.
Physical Facilities	:	Experimental fish farm with 60 ponds covering about 15 ha; laboratory; lecture theatre; museum; workshop; aquarium; offices.
Current Research Programmes	:	Aquatic weed control; breeding and culture of grass carp; culture of other exotic fishes; rice field fish culture; water pollution due to jute retting; effect of insecticides on fish.
Future Research Programmes	:	Predator control; fresh-water prawn culture; "live-fish" (*Ophicephalus* spp., *Clarias magur*, *Anabas scandens*, *Heteropheustes fossilis*) culture; fish seed farm management.
Training Facilities	:	Training of extension personnel and farmers.
Publications In	:	Indian Journal of Fisheries; Annals of Biochemistry and Experimental Medicine; Science and Culture; Journal of Indian Chemical Society; Journal of the Bombay Natural History Society.

BANGKHEN INLAND FISHERIES STATION

Location	:	50 Ngamwongwan Road, Amphur, Bangkhen, Bangkok.
Postal Address	:	Division of Inland Fisheries, Department of Fisheries, Rajadamnern Road, Bangkok, Thailand.
Name and Designation of Officer-in-Charge	:	Samran Damrongratana.
Number of Scientists Employed	:	4.
Physical Facilities	:	Breeding and hatching facilities; fish fry transportation equipment; experimental ponds; well-equipped laboratory.
Current Research Programmes	:	Experiments on combination stocking; fertility of bottom soil; parasites and diseases of fish; fish propagation by artificial fertilization and selective breeding.
Future Research Programmes	:	Continuation of current programmes.
Training Facilities	:	Fish culture course for 10 trainees at a time.
Publications In	:	Publications of the Department of Fisheries, Bangkok.

DEPARTMENT OF AQUICULTURE, COLLEGE OF FISHERIES, KASETSART UNIVERSITY

Location	:	Bangkhen, Bangkok.
Postal Address	:	Department of Aquiculture, College of Fisheries, Kasetsart University, Bangkok, Thailand.
Name and Designation of Officer-in-Charge	:	Professor Jinda Thiemmedh.
Number of Scientists Employed	:	4.
Physical Facilities	:	Laboratory of aquiculture; 44 experimental outdoor ponds and 18 cement tanks; one hatchery; workshop; class rooms and student laboratory; teaching aids and equipment; two off-campus stations; library; exhibits, teaching museum and research museum.
Current Research Programmes	:	Culture of local fresh-water fishes and Chinese carps; culture of milkfish and other brackish-water fishes.
Future Research Programmes	:	Experiments to induce spawning of Chinese carps; experiments to reduce reproductive potential of tilapia by irradiation; experiments on the culture of brackish-water invertebrates; studies on the adaptability of Tor tambroides and Probarbus jullieni to pond culture.
Training Facilities	:	Instruction in fish culture.
Publications In	:	Thai Fisheries Gazette; The Kasetsart Journal; The Journal of Science, Thai Science Society; Kasetsart University Fishery Research Bulletin; Notes from Faculty of Fisheries, Kasetsart University.

SATHANEEPRAMONG KLONGWAN, CHANGWAT PRACHUABKIRIKHAN
(Klongwan Brackish-water Fisheries Station)

Location	:	Klongwan District, Prachuabkirikhan Province.
Postal Address	:	Prachaubkirikhan, Thailand.
Name and Designation of Officer-in-Charge	:	Uthai Suntarotok, Head of Fisheries Station.
Number of Scientists Employed	:	2.
Physical Facilities	:	
Current Research Programmes	:	Experiments on oyster (Crassostrea vitrefacta) culture at the mouth of Pran River, Prachuab-kirikhan Province; investigations on the collection of milkfish fry.
Future Research Programmes	:	Survey of milkfish fry collection grounds; grey mullet culture; induced spawning of milkfish.
Training Facilities	:	
Publications In	:	Thai Fisheries Gazette.

MALAYSIA
43301

PUSAT PENYELIDEKAN MEMELIHARA IKAN 2 HAWA PANAS
(Tropical Fish Culture Research Institute)

Location	:	Batu Berendam, Malacca.
Postal Address	:	Batu Berendam, Malacca, Malaysia.
Name and Designation of Officer-in-Charge	:	Dr. G.A. Prowse, Director.
Number of Scientists Employed	:	5.
Physical Facilities	:	164 fish ponds, including Latin Square of 36 ponds; eight laboratories; class room; library; 36 concrete tanks with rainwater supply; tank room with aquaria.
Current Research Programmes	:	Fertilizer trials; studies of stocking rates; living space experiments; feeding trials; spawning of grass carp and other Chinese carps; plankton analysis and taxonomy.
Future Research Programmes	:	Primary production studies; further detailed fertilizer trials; electrophoretic analysis of pituitary hormones in connection with fish spawning; genetics of tilapia; fish spawning techniques.
Training Facilities	:	Limited.
Publications In	:	Garden's Bulletin,Singapore;Proceedings of Pacific Science Congress; Current Affairs Bulletin of the Indo-Pacific Fisheries Council; Proceedings of the International Association for Theoretical and Applied Limnology; Ichthyologica; Annual Reports of the Institute.

PUSAT PENYELIDEKAN PERIKANAN
(Fisheries Research Institute)

Location	:	Penang.
Postal Address	:	Calthrop Road, Glugor, Penang, Malaysia.
Name and Designation of Officer-in-Charge	:	D. Pathansali, Senior Research Officer.
Number of Scientists Employed	:	6 (2 for inland fishery research).
Physical Facilities	:	Laboratories; breeding and rearing tanks; five field stations for breeding, fry production and culture experiments.
Current Research Programmes	:	Propagation and culture of Macrobrachium rosenbergii; breeding of edible species of fish, local and imported; limnology and productivity of mining pools.
Future Research Programmes	:	Continuation of current programmes; fish disease prevention and control; breeding and selection of cultivated species.
Training Facilities	:	Training for farmers and junior technicians at fry breeding stations.
Publications In	:	Proceedings of the Indo-Pacific Fisheries Council; Malaysian Agricultural Journal.

INDONESIA
43401

LEMBAGA PENELITIAN PERIKANAN DARAT
(Inland Fisheries Research Institute)

Location	:	Bogor.
Postal Address	:	P.O. Box 51, Sempur 1, Bogor, Indonesia.
Name and Designation of Officer-in-Charge	:	R. Djajadiredja, Director.
Number of Scientists Employed	:	12.
Physical Facilities	:	Laboratory; fresh- and brackish-water ponds.
Current Research Programmes	:	Inorganic fertilization of fresh- and brackish-water ponds; study of artificial fish feeds; domestication of wild fish species; culture of tropical aquarium fishes; culture of shrimps.
Future Research Programmes	:	Improvement of hatcheries in the lowland areas; fish culture in running water.
Training Facilities	:	
Publications In	:	Contribution of Inland Fisheries Research Station, Bogor; Treubia; Hydrobiologia.

BRACKISHWATER FISH CULTURE SECTION, ESTUARINE FISHERIES DIVISION, PHILIPPINE FISHERIES COMMISSION

Location	:	Headquarters in Manila. Field stations in: Luzon Island - Claveria, Cagayan province; Dagat-Dagatan, Malabon, Rizal province; Sorsogon, Sorsogon province; Panay Island - Iloilo City; Mindanao Island - Lala, Lanao del Norte province.
Postal Address	:	Manila, Philippines.
Name and Designation of Officer-in-Charge	:	G.J. Blanco, Chief, Estuarine Fisheries Division.
Number of Scientists Employed	:	11.
Physical Facilities	:	Four field stations with facilities of 10 ha ponds and an office/laboratory building provided with limited laboratory facilities.
Current Research Programmes	:	Studies on methods of improving fish pond productivity through fertilization, supplementary feeding, pest control and stock manipulation; management techniques for milkfish pond nurseries; fish pond construction; culture of other species of fish and shrimps with milkfish; oyster and mussel culture.
Future Research Programmes	:	Continuation of current programmes and intensification of work on shrimp culture; research on culture of economic seaweeds.
Training Facilities	:	Limited.
Publications In	:	Philippine Journal of Fisheries; Proceedings of the Indo-Pacific Fisheries Council; special technical or popular bulletins issued by the Department of Agriculture and Natural Resources.

DEPARTMENT OF INLAND FISHERIES, COLLEGE OF FISHERIES, UNIVERSITY OF THE PHILIPPINES

Location	:	Diliman, Quezon City.
Postal Address	:	Diliman, Quezon City, Philippines.
Name and Designation of Officer-in-Charge	:	Professor R.O. Juliano, College Secretary and Chairman, Department of Inland Fisheries.
Number of Scientists Employed	:	8.
Physical Facilities	:	A series of experimental ponds and concrete tanks; laboratories for biological work; class rooms; larger pond system and water supply facilities planned for future expansion.
Current Research Programmes	:	Biological and taxonomic work on cultivable fish species; productivity and fertilization studies of fish ponds; fish pond construction and engineering; studies on fish parasites and control of fish diseases; length-weight relationship, growth condition and rate of stocking of cultivable fish species; food habit studies.
Future Research Programmes	:	Continuation of current research programmes and limnological studies.
Training Facilities	:	The ponds, laboratories and class rooms are available for training purposes, using available faculty staff for the purpose.
Publications In	:	Natural and Applied Science Bulletin of the University of the Philippines; Research Digest of the University of the Philippines.

FISH CULTURE DEPARTMENT, COLLEGE OF FISHERIES, MINDANAO STATE UNIVERSITY

Location	:	Marawi City.
Postal Address	:	Marawi City, Philippines.
Name and Designation of Officer-in-Charge	:	D.K. Villaluz, Professor and Dean, College of Fisheries.
Number of Scientists Employed	:	3 full-time; faculty members of related departments conduct part-time research on fish culture.
Physical Facilities	:	Office-laboratory and class room building; a number of fresh-water ponds; small hatchery with experimental concrete tanks; faculty and student cottages, all in the MSU campus, Marawi City. 5 ha fish pond project of the Philippine Fisheries Commission at Kialdan, Marantao, Lanao del Sur province; oyster farm and estuarine fish ponds for milkfish and shrimp (Penaeus monodon) at Naawan, Misamis Oriental province.
Current Research Programmes	:	Studies on combined fish and rice culture with fresh-water species of fish, both indigenous and introduced; biological studies of cultivable species; research on improving fish pond productivity; induced spawning of cultured species; culture of endemic cyprinid species; fish feeding and nutrition studies; acclimatization and ecological studies of Crassostrea gigas; preliminary observations on reproduction, larval development and cultivation of P. monodon.
Future Research Programmes	:	Continuation of current programs and joint work with U.S.-Philippine Fisheries Development (Inland) Project.
Training Facilities	:	Courses in fish culture offered.
Publications In	:	Special bulletins issued by the Mindanao State University, University Research Centre (URC); Philippine Journal of Fisheries.

FRESHWATER FISH CULTURE SECTION, FRESHWATER FISHERIES DIVISION, PHILIPPINE FISHERIES COMMISSION

Location	:	Headquarters in Manila. Field stations in: Luzon Island - San Mateo and San Pablo, Isabela province; Castillejos, Zambalas province; Tanay, Rizal province; Bay and Los Baños, Laguna province; Mindoro Island - Naujan, Oriental Mindoro province; Marawi City in Mindanao.
Postal Address	:	Manila, Philippines.
Name and Designation of Officer-in-Charge	:	Mrs. M.N. Delmendo, Acting Chief, Freshwater Fisheries Division.
Number of Scientists Employed	:	15.
Physical Facilities	:	Each of the eight field stations has approximately 5 ha of ponds and a small office/laboratory and field equipment.
Current Research Programmes	:	Development of techniques for the propagation of fish seedlings of cultivable species - carps, gourami, catfish, etc.; research on methods of improving fish pond productivity; fish pond fertilization, supplementary feeding, pest control, stock manipulation; observations on the introduction and acclimatization of new species - Chinese carps, Indian major carps, black bass and bluegills; studies on induced spawning of fish through use of hormones; fish pond construction; studies on fish diseases, parasites and pests; improvement of stock through breeding.
Future Research Programmes	:	Continuation of current programmes.
Training Facilities	:	Limited.
Publications In	:	Philippine Journal of Fisheries; Proceedings of the Indo-Pacific Fisheries Council; special technical or popular bulletins of the Department of Agriculture and Natural Resources.

JAPAN
45101

SUISAN JIKKENSHO, NOGAKUBU FUZOKU, TOKYO DAIGAKU
(Fisheries Laboratory, Faculty of Agriculture, University of Tokyo)

Location	:	Chita-cho, Chita-gun, Atsumi-cho, Atsumi-gun, Aichi Prefecture.
Postal Address	:	Chita-cho, Chita-gun, Aichi Prefecture, Japan.
Name and Designation of Officer-in-Charge	:	Dr. Seibin Arasaki, Director.
Number of Scientists Employed	:	3.
Physical Facilities	:	Laboratory facilities and facilities for field experiments.
Current Research Programmes	:	Propagation of useful aquatic animals.
Future Research Programmes	:	Artificial rearing of aquatic larvae.
Training Facilities	:	
Publications In	:	Contributions of the Fisheries Laboratory, Faculty of Agriculture, University of Tokyo.

TANSUIKU SUISAN KENKYUJO
(Freshwater Fisheries Research Laboratory)

Location	:	Hino-shi, Tokyo. Branch laboratories in Nikko and Ueda.
Postal Address	:	Hino-shi, Tokyo, Japan.
Name and Designation of Officer-in-Charge	:	Dr. Senji Tanita, Director.
Number of Scientists Employed	:	48.
Physical Facilities	:	Three research divisions, one concerned only with fish culture and another with water quality and fish nutrition; two branch laboratories (Nikko Branch and Ueda Branch), devoted to fish culture and propagation; experimental fish ponds in Hino-shi as well as in Nikko and Ueda; biological and chemical laboratories; pumps; dormitory in the Nikko Branch; hatcheries in Nikko and Ueda; green house and workshop in Ueda; boats.
Current Research Programmes	:	Stocking efficiency or standard stocking density, especially in the case of ayu, Plecoglossus altivelis; production of forage organisms; raciation of cyprinid fishes; photoperiodic effect on maturation of ayu; culture of exotic species; propagation mechanism of daphnids as forage organisms; tilapia culture; production of fish seedlings; fertilization by organic materials and circulation of nutrients; research on feed proteins; pathological research on nutritional disorders; fish production in farm ponds; breeding and hybridization of trout species.
Future Research Programmes	:	Continuation of current programmes.
Training Facilities	:	Training Institute at Headquarters.
Publications In	:	Bulletin of the Freshwater Fisheries Research Laboratory; Miscellaneous Research Reports.

HOKKAIDO FISH HATCHERY, HOKKAIDO GOVERNMENT

Location	:	Nakanoshima, Sapporo.
Postal Address	:	Nakanoshima, Sapporo, Japan.
Name and Designation of Officer-in-Charge	:	Tadaei Nakayama, Director.
Number of Scientists Employed	:	
Physical Facilities	:	
Current Research Programmes	:	Research and management of fish culture in Hokkaido, especially of rainbow trout, pond-smelt, carp and eel.
Future Research Programmes	:	Continuation of current programmes.
Training Facilities	:	
Publications In	:	Scientific Reports of the Hokkaido Fish Hatchery.

HOKKAIDO SAKE-MASU FUKAJO
(Hokkaido Salmon Hatchery, Fisheries Agency, Ministry of Agriculture and Forestry)

Location	:	Nakanoshima, Sapporo.
Postal Address	:	Nakanoshima, Sapporo, Japan.
Name and Designation of Officer-in-Charge	:	Ayahiko Hemmi, Director.
Number of Scientists Employed	:	9.
Physical Facilities	:	Six branches; 40 hatcheries.
Current Research Programmes	:	Physiological, ecological and taxonomic research on Pacific salmon; conservation and propagation of salmon; improvement of hatchery management
Future Research Programmes	:	
Training Facilities	:	
Publications In	:	Scientific Reports of the Hokkaido Salmon Hatchery.

THE TOKAI REGIONAL FISHERIES RESEARCH LABORATORY

Location	:	Arasaki, Nagai, Yokosuka, Kanagawa Prefecture.
Postal Address	:	Arasaki, Nagai, Yokosuka, Kanagawa Prefecture, Japan.
Name and Designation of Officer-in-Charge	:	Dr. S. Suto, Chief of Section, Fish Culture.
Number of Scientists Employed	:	8.
Physical Facilities	:	Sea water circulation system; 12 indoor tanks; 10 outdoor tanks; water system with controlled temperatures; three boats.
Current Research Programmes	:	Culture of marine fish, shrimps and shellfish; hormonal regulation of spawning and growth; diseases of cultured fish; artificial fish reefs; hybrids of shellfish.
Future Research Programmes	:	Continuation of current programmes.
Training Facilities	:	For one or two persons a year.
Publications In	:	The Bulletin of the Tokai Regional Fisheries Research Laboratory.

TOKYO SUISAN DAIGAKU
(Tokyo University of Fisheries)

Location	:	Laboratories at (i) Oisumi-mura; (ii) Yoshida-machi.
Postal Address	:	(i) Oisumi-mura, Kitakoma-gun, Yamanashi-ken, Japan. (ii) Yoshida-machi, Haibara-gun, Shizuoka-ken, Japan.
Name and Designation of Officer-in-Charge	:	Dr. Denzaburo Inaba, Director and Professor of Fish Culture.
Number of Scientists Employed	:	Variable.
Physical Facilities	:	Raceway concrete ponds for trout hatchery; various types of ponds for fresh-water fishes, especially eel.
Current Research Programmes	:	Physiological study of rainbow trout spawning; hybridization of trout; food for eel; fish diseases; the care of cultured warm-water fishes.
Future Research Programmes	:	Continuation of current programmes.
Training Facilities	:	20 trainees can be accommodated.
Publications In	:	The Journal of the Tokyo University of Fisheries.

TAIR UAN SHEENG SHOEI CHAAN SHYH YANN SUOO
(Taiwan Fisheries Research Institute)

Location	:	Headquarters: Keelung; Stations: Tainan; Lukang, Changhua; Chupei, Hsinchu.
Postal Address	:	125 Hou-Ih Road, Keelung, Taiwan, Republic of China. Stations: (i) Tainan Fish Culture Station, P.O. Box 44 Tainan, Taiwan, Republic of China. (ii) Lukang Fish Culture Station, Lukang, Changhua, Taiwan, Republic of China. (iii) Chupei Fish Culture Station, Chupei, Hsinchu, Taiwan, Republic of China.
Name and Designation of Officers-in-Charge	:	Dr. H.T. Teng, Director of Institute; T.K. Liang, Director, Tainan Fish Culture Station; H. Kuo, Chief, Lukang Fish Culture Station; C.K. Liu, Chief, Chupei Fish Culture Station.
Number of Scientists Employed	:	Central Institute: 32; Lukang: 2; Tainan: 3; Chupei: 2.
Physical Facilities	:	50 ha of brackish-water fish ponds; 16 ha of fresh-water fish ponds; laboratory; trout hatchery; fishery biology museum; general office; dormitory.
Current Research Programmes	:	Studies on milkfish and shrimp culture; oyster culture; artificial propagation of Chinese carps; utilization of chemical fertilizers for fish culture, mullet culture, eel culture, polyculture of Chinese carps; biology and culture of benthic algae; genetics and fish breeding, fish diseases and parasites.
Future Research Programmes	:	Continuation of current programmes.
Training Facilities	:	Facilities for training 10 apprentices.
Publications In	:	Bulletin of Taiwan Fisheries Research Institute; Journal of China Fisheries Association (Taiwan).

THE INSTITUTE OF FISHERY BIOLOGY, NATIONAL TAIWAN UNIVERSITY

Location	:	Taipei.
Postal Address	:	Taipei, Taiwan, Republic of China.
Name and Designation of Officer-in-Charge	:	Professor Yun-sheng Liang, Acting Director.
Number of Scientists Employed	:	7.
Training Facilities	:	Limnological laboratory; aquarium; experimental ponds.
Current Research Programmes	:	Chemical and biological studies of the fertilized and unfertilized fresh-water fish ponds and reservoirs.
Future Research Programmes	:	Continuation of current research programmes; studies on environmental factors and the early development of silver carp and grass carp; comparative studies of feeds and growth of silver carp, bighead and their hybrids; investigations on Caesium-137 content of Chinese carps in reservoirs and ponds.
Training Facilities	:	No specialized instruction in fish culture.
Publications In	:	Report of the Institute of Fishery Biology of the Ministry of Economic Affairs and National Taiwan University.

DENMARK
51101

DANSK FORSØGSDAMKULTUR
(Danish Research Station for Trout Farming)

Location	:	Brøns.
Postal Address	:	Brøns, Denmark.
Name and Designation of Officer-in-Charge	:	Dr. C.J. Rasmussen.
Number of Scientists Employed	:	3.
Physical Facilities	:	Biological laboratory; 47 earth ponds (12 x 30 m), 30 earth ponds (6 x 12 m); 50 concrete tanks (2 - 3.5 m^2); 14 fibreglass tanks (40 m^2); 24 aquaria (400 litre).
Current Research Programmes	:	Control of fish diseases; feeding experiments; selective breeding of cultivable fishes.
Future Research Programmes	:	Continuation of current programmes.
Training Facilities	:	
Publications In	:	Meddelelser fra Forsøgsdambruget (In Danish)

NORWAY
51401

TRONDHEIM BIOLOGISKE STASJON, DET KONGELIGE NORSKE VIDENSKABERS SELSKAB MUSEET
(Trondheim Biological Station, The Royal Norwegian Society of Sciences and Letters)

Location	:	Trondheim.
Postal Address	:	Trondheim, Norway.
Name and Designation of Officer-in-Charge	:	D. Rustad, Manager.
Number of Scientists Employed	:	2.
Physical Facilities	:	Laboratory (accommodation for 1-2 visitors); hatchery; a small public aquarium; research vessel and smaller boats.
Current Research Programmes	:	Hatching and rearing of plaice (Pleuronectes platessa); ecological investigations.
Future Research Programmes	:	Continuation of current programmes.
Training Facilities	:	
Publications In	:	Det Kongelige Norske videnskabers selskab, Forhandlinger; Det Kongelige Norske videnskabers selskab, Museet, Årbok.

STATENS BIOLOGISKE STASJON FLØDEVIGEN
(State Biological Station, Flødevigen)

Location	:	Flødevigen, Southern coast.
Postal Address	:	Flødevigen, Arendal, Norway.
Name and Designation of Officer-in-Charge	:	G. Dannevig, Director.
Number of Scientists Employed	:	3.
Physical Facilities	:	Laboratories for biological and chemical research; three large salt-water ponds; aquaria with constantly renewed salt water; facilities for hatching cod and lobster on a large scale; modern equipped research vessel.
Current Research Programmes	:	Fishery research in Skagerak and adjacent waters; liberation of cod larvae in the fjords of southern Norway.
Future Research Programmes	:	Continuation of current programmes.
Training Facilities	:	
Publications In	:	Report on Norwegian Fishery and Marine Investigations; Journal du Conseil.

SWEDEN
51601

LAXFORSKNINGSINSTITUTET
(Swedish Salmon Research Institute)

Location	:	Office in Bankgatan, Sundsvall; laboratories at Alvkarleö.
Postal Address	:	Bankgatan 8, Sundsvall, Sweden. P.O. Box 654, Alvkarleö, Sweden.
Name and Designation of Officer-in-Charge	:	Fil Dr. B. Carlin.
Number of Scientists Employed	:	5.
Physical Facilities	:	Laboratories for fishery biology and fish pathology; pilot farm.
Current Research Programmes	:	Rearing techniques, diet composition, fish diseases, tagging experiments and physiology of Atlantic salmon.
Future Research Programmes	:	
Training Facilities	:	
Publications In	:	Laxforskningsinstitutets Meddelande.

NETHERLANDS
52101

ORGANISATIE TER VERBETERING VAN DE BINNENVISSERIJ
(Organization for the Improvement of Inland Fisheries)

Location	:	Head Office: Utrecht.
Postal Address	:	Stadhouderslaan 53, Utrecht, Netherlands.
Name and Designation of Officer-in-Charge	:	D.E. van Drimmelen.
Number of Scientists Employed	:	3.
Physical Facilities	:	Two pike hatcheries (Nieuw Vennep and Grouw); warm-water pond fish farm (170 ha) with experimental facilities in Eastern Flevoland; warm-water pond fish farm (142 ha) in Valkenswaard/Bergeyk; experimental station (Beesd).
Current Research Programmes	:	Problems connected with production (selection, fertilization, feeding, control of aquatic weeds, etc.); production of forage fish.
Future Research Programmes	:	Testing of stocking material; sport fishing.
Training Facilities	:	Limited.
Publications In	:	Annual Report of the Organization.

BELGIUM
52201

CENTRE DE PISCICULTURE EXPERIMENTALE DE LA FONDATION HOOVER POUR LE DEVELOPPEMENT DE L'UNIVERSITE DE LOUVAIN
(Experimental Fish Culture Centre of the Hoover Foundation for Development of the University of Louvain)

Location	:	10 km south of Brussels.
Postal Address	:	28 rue Dwersbos, Linkebeek, Belgium.
Name and Designation of Officer-in-Charge	:	M. Huet, Director.
Number of Scientists Employed	:	1.
Physical Facilities	:	48 ponds covering a surface area of 1.5 ha; installations for artificial incubation; heated shed for rearing warm-water fishes (tilapias).
Current Research Programmes	:	Experiments in the culture of salmonids, cyprinids and some predatory species.
Future Research Programmes	:	Continuation of current programmes.
Training Facilities	:	
Publications In	:	

SECTION D'HYDROBIOLOGIE, STATION DE RECHERCHES DES EAUX ET FORETS
(Hydrobiology Section, Forest and Water Research Station)

Location	:	10 km south-east of Brussels.
Postal Address	:	Groenendaal-Hoeilaart, Belgium.
Name and Designation of Officer-in-Charge	:	M. Huet, Director.
Number of Scientists Employed	:	2.
Physical Facilities	:	Rearing ponds; laboratory; field equipment.
Current Research Programmes	:	Experimental studies on the techniques of rearing salmonids, cyprinids and predators (pike and pikeperch); fish diseases and control of aquatic weeds, especially by the use of herbicides.
Future Research Programmes	:	Continuation of current programmes.
Training Facilities	:	
Publications In	:	Travaux de la Station de recherches des eaux et forêts, Série D: Hydrobiologie.

FRANCE
52401

DIRECTION DES RECHERCHES SUR LES PECHES CONTINENTALES, CENTRE TECHNIQUE FORESTIER TROPICAL
(Directorate of Inland Fisheries Research, Technical Centre of Tropical Forestry)

Location	: Headquarters: Nogent-sur-Marne, France; Field stations in Ivory Coast and Madagascar (see 14101 and 15601); Division of Fisheries Research, Sénégal (see 14101).
Postal Address	: 45 bis Avenue de la Belle-Gabrielle, 94 Nogent-sur-Marne, France.
Name and Designation of Officer-in-Charge	: M. Lemasson, Director of Research.
Number of Scientists Employed	: Paris: 2; (Ivory Coast: 2; Madagascar: 2; Sénégal: 1).
Physical Facilities	: A fish culture research station in Bouaké, Ivory Coast; laboratory at Tananarive, Madagascar; fish culture research stations at Perinet and Ampamaherana, Madagascar; fisheries research laboratory in Sénégal.
Current Research Programmes	: Details on sheets 14101 and 15601.
Future Research Programmes	: Details on sheets 14101 and 15601.
Training Facilities	: A centre for the training of intermediate level personnel in Bouaké, Ivory Coast.
Publications In	: Publications du Centre Technique Forestier Tropical; Bois et forêts des tropiques.

NEW HATCHERY, WHITE FISH AUTHORITY, MINISTRY OF AGRICULTURE, FISHERIES AND FOOD

Location	:	Port Erin.
Postal Address	:	Breakwater Road, Port Erin, Isle of Man (Via United Kingdom)
Name and Designation of Officer-in-Charge	:	J.E. Shelbourne
Number of Scientists Employed	:	5.
Physical Facilities	:	200 tanks of various sizes for fish rearing work; water and air temperature control; automatic larval food production and counting systems; research cubicles; offices; some instrumentation.
Current Research Programmes	:	Development of experimental techniques for rearing marine flatfish and application of these techniques for mass production purposes; hatchery output is used to pioneer marine fish farm techniques in sea lochs and in the warm effluent of coastal power stations.
Future Research Programmes	:	Site management techniques for the commercial production of valuable marine flatfish and possibly crustaceans. Fields of study include: provision of sound genetic stock; natural and artificial fish foods; stock/space relationships; physico-chemical environment, optimal and tolerance levels; diseases; predation; competition.
Training Facilities	:	Limited at present; places for one or two trainees February-July.
Publications In	:	Journal du Conseil; Journal of Marine Biological Association, United Kingdom; New Scientist; Proceedings of the Nutrition Society, United Kingdom.

UNIVERSITY OF LIVERPOOL MARINE BIOLOGICAL STATION

Location	:	Port Erin.
Postal Address	:	Port Erin, Isle of Man (via United Kingdom)
Name and Designation of Officer-in-Charge	:	J.S. Colman, Director.
Number of Scientists Employed	:	8.
Physical Facilities	:	Outdoor sea-water spawning ponds; running sea water; three controlled temperature rooms; indoor tanks for marine fish rearing; usual ancillary services; near-water trawler.
Current Research Programmes	:	Density-dependent growth in laboratory-reared plaice (Pleuronectes platessa).
Future Research Programmes	:	Growth and physiology of laboratory-reared marine fish; selection and hybridization of marine fish for culture.
Training Facilities	:	Can accept graduates for research projects leading to Ph.D. degree.
Publications In	:	Journal du Conseil; Annual Report of Marine Biological Station.

ITALY
54301

ISTITUTO DI IDROBIOLOGIA E PESCICOLTURA DELL'UNIVERSITA DI PERUGIA
(Hydrobiology and Pisciculture Institute, Perugia University)

Location	:	Monte del Lago sul Trasimeno, Perugia.
Postal Address	:	Monte del Lago sul Trasimeno, Perugia, Italy.
Name and Designation of Officer-in-Charge	:	Professor G. Moretti.
Number of Scientists Employed	:	8.
Physical Facilities	:	Laboratory and field facilities for limnological and piscicultural investigations.
Current Research Programmes	:	Pisciculture in lakes and running waters.
Future Research Programmes	:	Hydrobiology of small inland waters of the Mediterranean area; biology of ponds.
Training Facilities	:	University teaching in hydrobiology, pisciculture and ecology.
Publications In	:	Rivista di Idrobiologia; Bollettino dell' Unione Zoologica Italiana; Atti Accademia Nazionale Italiana Entomologia; Bollettino della Società di Biologia Sperimentale; Archivio Botanico Biogeografico Italiano; Verhandlungen der Internationalen Vereinigung für theoretische und angewandte Limnologie; Hydrologie.

YUGOSLAVIA
55101

INSTITUT ZA SLATKOVODNO RIBARSTVO
(Institute for Fresh-water Fisheries)

Location	:	Zagreb.
Postal Address	:	ulica B. Adzije 2/V, Zagreb, Yugoslavia.
Name and Designation of Officer-in-Charge	:	Dr. Z. Livojević.
Number of Scientists Employed	:	7.
Physical Facilities		
Current Research Programmes	:	Selection of carp; use of herbicides in fish ponds; fertilization of fish ponds; mixed culture of Cyprinus carpio and Silurus glanis; artificial spawning of carp.
Future Research Programmes	:	Continuation of current programmes.
Training Facilities	:	Good training facilities.
Publications In	:	Ribarstvo Jugoslavije; Bulletins of the Institute.

ZAVOD ZA BIOLOGIJU I PATOLOGIJU RIBA I PCELA VETERINARSKOG FAKULTETA
(Department of Biology and Pathology of Fish and Bees, Veterinary Faculty)

Location	:	Zagreb.
Postal Address	:	Zagreb 2, p.p. 411 (Heinzelova 55), Yugoslavia.
Name and Designation of Officer-in-Charge	:	Professor Dr. Ivo Tomasec.
Number of Scientists Employed	:	3.
Physical Facilities	:	Microbiological and virological laboratories; experimental ponds and aquaria; library.
Current Research Programmes	:	Etiology, pathogenesis and control of infectious dropsy of carp; fertilization of carp ponds; physiology of digestion in carp.
Future Research Programmes	:	Viral diseases of fish; physiology of digestion and nutrition of carp; different methods of improvement of fish breeding in ponds.
Training Facilities	:	Courses in biology, farming and diseases of fish for students of veterinary medicine.
Publications In	:	Veterinarski arhiv; Ribarstvo Jugoslavije.

ZAVOD ZA RIBARSTVO
(Fisheries Institute)

Location	:	Belgrade.
Postal Address	:	Sjenicka 1, Belgrade, Yugoslavia.
Name and Designation of Officer-in-Charge	:	N. Disalov, Director.
Number of Scientists Employed	:	6.
Physical Facilities	:	
Current Research Programmes	:	
Future Research Programmes	:	
Training Facilities	:	
Publications In	:	

ZAVOD ZA RIBARSTVO NA SRM
(Fisheries Institute of the State of Macedonia)

Location	:	Skopje.
Postal Address	:	P.O. Box 190, Skopje, Yugoslavia.
Name and Designation of Officer-in-Charge	:	Nikola Petrovski, Director.
Number of Scientists Employed	:	3.
Physical Facilities	:	Headquarters: fully-equipped laboratories; aquarium; field laboratory; Dojran lake (natural) with a hatchery for carp, and Mavrovo lake (artificial) with a hatchery for trout.
Current Research Programmes	:	Feeds and feeding in trout and carp culture in ponds; methods of fish culture in impoundments; selection and genetic problems in trout culture; introduction and acclimatization of new species of fish.
Future Research Programmes	:	Continuation of current programmes.
Training Facilities	:	Courses for the students of the Agricultural Faculty of the University of Skopje; course in general fisheries and especially in fish culture in ponds.
Publications In	:	Izdania; Folia Balcanica; Annual Report.

BULGARIA
55401

STANZIA PO SLADKOVODNO RIBARSTVO -
(Fresh-water Fishery Research Station)

Location	:	Plovdiv.
Postal Address	:	Plovdiv, Bulgaria.
Name and Designation of Officer-in-Charge	:	P. Boev, Director.
Number of Scientists Employed	:	8.
Physical Facilities	:	Fish ponds; well-equipped laboratory; field equipment.
Current Research Programmes	:	Pond fertilization; feed preparation and feeding of carp; induced breeding and incubation of spawn; acclimatization of grass carp (Ctenopharyngodon idella); studies on yearling and on table-sized carp; experiments on the use of complementary fishes (Silurus glanis, Esox lucius, Lucioperca lucioperca) in carp ponds; studies on Azotobacter in fish ponds.
Future Research Programmes	:	Continuation of current programmes; studies on the cultivation of Cladocera as food for artificially bred carp; cultivation of Coregonus peled, Hypophthalmichthys molitrix, etc.; introduction and acclimatization of plankton-feeding fish in dams; acclimatization of tilapia and other fish species in carp ponds; introduction and acclimatization of invertebrate organisms in dams and lakes; genetic selection of carp.
Training Facilities	:	
Publications In	:	Izvestija na instituta po ribovadstvo i ribolov, Varna; Givotnovadni nauki (Journal of the Bulgarian Academy of Science), Sofia.

ZOOTEKHICHNI FAKULTET, VYSSHI SELSKOSTOPANSKI INSTITUT "G. DIMITROV"
(Chair of Fish Culture, Faculty of Zootechnique, Higher Institute of Agriculture "G. Dimitrov")

Location	:	Sofia.
Postal Address	:	Dragan Tzankov 8, Sofia, Bulgaria.
Name and Designation of Officer-in-Charge	:	S. Kamburova.
Number of Scientists Employed	:	3.
Physical Facilities	:	
Current Research Programmes	:	Carp and trout breeding; selection of carp.
Future Research Programmes	:	Continuation of current programmes and studies on fish feed preparation.
Training Facilities	:	
Publications In	:	Scientific works of the Higher Agricultural Institute "G. Dimitrov", Faculty of Zoo-technology.

GERMANY, FEDERAL REPUBLIC OF
56101

BAYERISCHE BIOLOGISCHE VERSUCHSANSTALT
(Bavarian Biological Experimental Station)

Location	:	Headquarters in Munich; Pond management section at Wielenbach/Oberbayern; Sewage experiment plot at Grosslappen.
Postal Address	:	8 München 22, Kaulbachstrasse 37, Federal Republic of Germany.
Name and Designation of Officer-in-Charge	:	Professor H. Liebmann.
Number of Scientists Employed	:	12.
Physical Facilities	:	Facilities for studies in propagation, pathology and therapy, electrophoresis, radioactivity and pond management.
Current Research Programmes	:	Culture of carp and trout; fish diseases and effects of sewage, electrophoresis and radioactivity; weed control in ponds.
Future Research Programmes	:	Enzymes and blood counts; therapy of important fish diseases and means of increasing disease resistance; development of new feeds for trout and carp.
Training Facilities	:	Courses in fishery biology, fish diseases, hydrobiology, limnology and pond management.
Publications In	:	Münchner Beiträge zur Abwasser-, Fischerei- und Flussbiologie.

BAYERISCHE LANDESANSTALT FÜR FISCHEREI
(Bavarian Institute of Fishery)

Location	:	Starnberg, Bavaria.
Postal Address	:	Weilheimer Strasse 8a, 813 Starnberg, Federal Republic of Germany.
Name and Designation of Officer-in-Charge	:	Dr. E. Rehbronn.
Number of Scientists Employed	:	4.
Physical Facilities	:	Well-equipped laboratory; class rooms and hostel for 20 students; trout ponds; aquaria.
Current Research Programmes	:	Experiments on feeding of trout with pellets; breeding; chemical control of weeds.
Future Research Programmes	:	Continuation of current programmes.
Training Facilities	:	Training courses in all branches of inland fisheries.
Publications In	:	Allgemeine Fischereizeitung; Der Fischwirt; Der Fischbauer; Archiv für Fischereiwissenschaft.

LANDESANSTALT FÜR FISCHEREI, NORDRHEIN-WESTFALEN
(Agricultural Institute of Fisheries for North Rhine and Westphalia)

Location	:	Albaum (Sauerland)
Postal Address	:	5941 Albaum über Altenhundem/Lenne, Federal Republic of Germany.
Name and Designation of Officer-in-Charge	:	Dr. H.W. Denzer, Director.
Number of Scientists Employed	:	3.
Physical Facilities	:	Well-equipped laboratories for studies on physiology, histology, toxicology, fish diseases, fisheries biology and chemistry; workshop; trout ponds.
Current Research Programmes	:	Studies of fish diseases; studies on the effects of dry feeds on growth; productivity tests; breeding.
Future Research Programmes	:	Continuation of current programmes.
Training Facilities	:	
Publications In	:	Archiv für Fischereiwissenschaft; Der Fischwirt; Allgemeine Fischereizeitung; Sitzungsberichte der Gesellschaft naturforschender Freunde zu Berlin; Zoological Contributions; Pamphlets issued by the Institute.

STAATL. LEHR- UND VERSUCHSANSTALT FÜR FISCHEREI IN STARNBERG
(State Training and Experimental Station for Fisheries in Starnberg)

Location	:	(i) Starnberg; (ii) Sub-station for carp pond management at Höchstadt/Aisch.
Postal Address	:	(i) Weilheimer Strasse 8a, 813 Starnberg, Federal Republic of Germany. (ii) Greiendorfer Weg 8, 8552 Höchstadt/ Aisch, Federal Republic of Germany.
Name and Designation of Officer-in-Charge	:	Dr. E. Rehbronn.
Number of Scientists Employed	:	3.
Physical Facilities	:	
Current Research Programmes	:	
Future Research Programmes	:	
Training Facilities	:	
Publications In	:	

ZOOLOGISCHES INSTITUT DER UNIVERSITÄT ERLANGEN
(The Zoological Institute, University of Erlangen)

Location	:	Erlangen.
Postal Address	:	852 Erlangen, Universitätsstrasse 19, Federal Republic of Germany.
Name and Designation of Officer-in-Charge	:	Professor W. Wunder.
Number of Scientists Employed	:	
Physical Facilities	:	Research laboratory; library; aquarium.
Current Research Programmes	:	Research on carp and trout culture, including the biology, diseases and nutriton of these species.
Future Research Programmes	:	Continuation of current programmes.
Training Facilities	:	Facilities for instruction in the biology and diseases of fresh-water fisheries and in research work in fish farms near Erlangen.
Publications In	:	Allgemeine Fischereizeitung; Der Fischwirt; Archiv für Hydrobiologie; Zeitschrift für Fischereiwissenschaften; Zeitschrift für Fischerei.

AUSTRIA
56301

BUNDESINSTITUT FÜR GEWÄSSERFORSCHUNG UND FISCHEREIWIRTSCHAFT
(Federal Institute for Aquatic Research and Fisheries Management)

Location	:	Scharfling am Mondsee.
Postal Address	:	5341 Scharfling, Austria.
Name and Designation of Officer-in-Charge	:	Dr. E. Bruschek.
Number of Scientists Employed	:	3.
Physical Facilities	:	Laboratories for hydrobiological studies; experimental fish ponds; boarding school to hold courses for fishermen, students, teachers and administrators.
Current Research Programmes	:	Salmonid and pike culture; physiological investigations on fish under various conditions; experiments on artificial feeding; control of fish diseases.
Future Research Programmes	:	Continuation of current programmes.
Training Facilities	:	Provision to train two research workers at the Institute and 30 operatives at the boarding school.
Publications In	:	Österreichs Fischerei.

INSTITUT FÜR FISCHKUNDE, TIERÄRZTLICHE HOCHSCHULE, WIEN
(Institute for Ichthyology, Veterinary University of Vienna)

Location	:	Vienna.
Postal Address	:	Linke Bahngasse 11, 1030 Vienna III, Austria.
Name and Designation of Officer-in-Charge	:	Professor D.R. Supperec, Director.
Number of Scientists Employed	:	2.
Physical Facilities	:	Some facilities for studies on microbiology, pathology, histology and parasitology of fish.
Current Research Programmes	:	Studies on sepsis of the blood in rainbow trout, infectious dropsy of carp and harmful effects of defective feeding and parasitic diseases.
Future Research Programmes	:	Continuation of current programmes.
Training Facilities	:	
Publications In	:	Wiener Tierarztliche Monatsschrift; Österreichs Fischerei; Zeitschrift für Fischerei (Berlin); Zeitschrift für Parasitenkunde; Zentralblatt für Veterinärmedizin; Zentralblatt für Bakteriologie.

ZWEIGSTELLE FÜR KARPFENTEICHWIRTSCHAFT, INSTITUT FÜR BINNENFISCHEREI, DEUTSCHE AKADEMIE DER LANDWIRTSCHAFTSWISSENSCHAFTEN ZU BERLIN
(Division of Carp Culture, Institute of Inland Fisheries, German Academy for Agricultural Sciences in Berlin)

Location	:	Königswartha (Kreis Bautzen).
Postal Address	:	8601 Königswartha, Kreis Bautzen, East Germany.
Name and Designation of Officer-in-Charge	:	Dr. W. Müller.
Number of Scientists Employed	:	2.
Physical Facilities	:	Experimental ponds; aquaria room; chemical and biological laboratories; library.
Current Research Programmes	:	Carp pond management; fertilization experiments with phosphates and nitrates; research on natural food production and utilization; feeding experiments with cereals and protein-rich foodstuffs.
Future Research Programmes	:	Continuation of current programmes.
Training Facilities	:	Available for training in fish culture, fish pond management and limnology of ponds.
Publications In	:	Deutsche Fischereizeitung; Zeitschrift für Fischerei.

POLAND
57201

ZAKLAD BIOLOGII I HODOWLI RYB, INSTYTUT ZOOTECNIKI
(Department of Biology and Fish Culture, Institute of Zootechnology)

Location	:	Kraków.
Postal Address	:	Zator Kolo Krakowa, Poland.
Name and Designation of Officer-in-Charge	:	Dr. Z. Rychlicki.
Number of Scientists Employed	:	5.
Physical Facilities	:	Ponds and tanks.
Current Research Programmes	:	Studies on carp culture; fish feeds and fertilization of ponds.
Future Research Programmes	:	Continuation of current programmes.
Training Facilities	:	
Publications In	:	Roczniki Nauk Rolniczych; Acta Hydrobiologica.

KATEDRA RYBACTWA, SZKOLY GLÓWNEJ GOSPODARSTWA WIEJKIEGO W WARSZAWIE
(Chair of Fisheries, College of Agriculture in Warsaw)

Location	:	Warsaw.
Postal Address	:	ul. Rakowiecka 8, Warsàw, Poland.
Name and Designation of Officer-in-Charge	:	Dr. K. Stegman.
Number of Scientists Employed	:	3.
Physical Facilities	:	Biological laboratory with aquarium hall; chemical laboratory; experimental fish ponds in Laki Jaktorowskie, near Warsaw.
Current Research Programmes	:	Research on selection of carp; environmental requirements and adjustment of environment to the requirements of pond fishes; management of fish ponds.
Future Research Programmes	:	Continuation of current programmes.
Training Facilities	:	Facilities for about five candidates to work for M.Sc.
Publications In	:	Zeszyty Naukowe Szkoly Glównej Gospodarstwa Wiejskiego w Warszawie, Zootechnika, Rybactwo (Scientific papers of the College of Agriculture in Warsaw, Zootechnology Series, Fisheries).

ZAKLAD BIOLOGII WÓD, POLSKA AKADEMIA NAUK
(Laboratory of Water Biology, Polish Academy of Sciences)

Location	:	Kraków.
Postal Address	:	Slawkowska 17, Kraków, Poland.
Name and Designation of Officer-in-Charge	:	Dr. S. Wróbel.
Number of Scientists Employed	:	28.
Physical Facilities	:	Three experimental fish farms; hydrobiological station at Goczalkowice; central laboratory in Kraków.
Current Research Programmes	:	Comprehensive hydrobiological and ecological investigation of the conditions and basis of fish production in ponds.
Future Research Programmes	:	Continuation of current research programmes.
Training Facilities	:	
Publications In	:	Acta Hydrobiologica.

TER. PRACOWNIA RZECRNA, INSTYTUT RYBACTWA SRÓDLADOWEGO (IRS)
(Fisheries Field Station, Inland Fisheries Institute)

Location	:	Gdańsk-Oliwa.
Postal Address	:	Gdańsk-Oliwa, Bytowska 5, Poland.
Name and Designation of Officer-in-Charge	:	R. Bartel.
Number of Scientists Employed	:	3.
Physical Facilities	:	21 experimental ponds; laboratory equipment for biological research.
Current Research Programmes	:	Selective breeding and feeding of rainbow trout; induced spawning of rainbow trout; rearing methods of sea trout; problems related to stocking the Baltic Sea with sea trout and rainbow trout.
Future Research Programmes	:	Continuation of current research programmes.
Training Facilities	:	
Publications In	:	Roczniki Nauk Rolniczych, Series H; Gospodarka Rybna; Ekologia Polska (Series A & B); Acta Hydrobiologica.

KATEDRA RYBACTWA, WYZSZA SZKOLA ROLNICZA
(Department of Fisheries, High School of Agriculture)

Location	:	Kraków.
Postal Address	:	al. Mickiewicza 24/28, Kraków, Poland.
Name and Designation of Officer-in-Charge	:	Professor S. Zarnecki.
Number of Scientists Employed	:	6.
Physical Facilities	:	Carp and trout ponds and tanks.
Current Research Programmes	:	Selection and biology of fish; fertilization of fish ponds.
Future Research Programmes	:	Continuation of current programmes.
Training Facilities	:	
Publications In	:	Roczniki Nauk Rolniczych; Acta Hydrobiologica.

ZAKLAD GOSPODARKI STAWOWEJ, INSTYTUT RYBACTWA SRÓDLADOWEGO
(Department of Fish Culture, Inland Fisheries Institute)

Location	:	Zabieńiec.
Postal Address	:	Zabieńiec, Piaseczno k., Warsaw, Poland.
Name and Designation of Officer-in-Charge	:	Dr. P. Wolny.
Number of Scientists Employed	:	11.
Physical Facilities	:	Laboratory (6300 m^3) including biological, chemical, biochemical and isotope laboratories; 76 experimental ponds; fish farms; guest rooms.
Current Research Programmes	:	Chemical fertilization; acclimatization of plant-feeding fish; breeding and selection of Cyprinus carpio.
Future Research Programmes	:	Circulation of mineral compounds in ponds.
Training Facilities	:	Facilities for three research workers.
Publications In	:	Roczniki Nauk Rolniczych (Series H); Gospodarka Rybna; Ekologia Polska (Series A & B); Acta Hydrobiologica.

ZAKLAD LIMNOLOGII I RYBACTWA, WYZSZEJ SZKOLY ROLNICZEJ WE WROCLAWIU
(Institute of Limnology and Fishery of the University School of Agriculture in Wroclaw)

Location	:	Wroclaw.
Postal Address	:	ul. Bartla 6, Wroclaw, Poland.
Name and Designation of Officer-in-Charge	:	Professor Marian Stangenberg, Director.
Number of Scientists Employed	:	5 scientists, 3 technicians, and post-graduate students.
Physical Facilities	:	Chemical, microbiological and isotope laboratories with equipment for biological investigations in nine rooms in Wroclaw and eight rooms in the Experimental Lake Station at Charzykowo Lake (Pommerenia), near Chojnice.
Current Research Programmes	:	Influence of some herbicides on plant and animal communities in carp ponds; chemical composition of the carp pond waters in Poland; quantitative distribution of bacteria in lakes and ponds of Poland.
Future Research Programmes	:	Continuation of current programmes and studies on phosphorus and nitrogen cycle; primary production with particular reference to the radiophosphorus uptake and release by plants; ecology of Coregonus lavaretus from the stocked populations in eutrophic lakes; biochemical oxygen demand of inland waters.
Training Facilities	:	Facilities for postgraduate students to work for doctorate degrees; limited facilities for other research workers.
Publications In	:	Polskie Archiwum Hydrobiologii, Warszawa; Memorie dell'Istituto Italiano di Idrobiologia, Pallanza; Internationale Revue der gesamten Hydrobiologie und Hydrographie; Archiv für Hydrobiologie.

CZECHOSLOVAKIA
57301

BIOLOGICKÁ STANICE VYSOKÉ ŠKOLY ZEMĚDĚLSKE V BRNĚ
(Biological Station, University of Agriculture in Brno)

Location	:	Lednice na Moravě.
Postal Address	:	Lednice na Morave, Czechoslovakia.
Name and Designation of Officer-in-Charge	:	Professor B. Kostomarov.
Number of Scientists Employed	:	3.
Physical Facilities	:	Biological and hydrochemical laboratory; fish ponds managed by the State Fisheries.
Current Research Programmes	:	Investigations on the productivity of fish ponds; studies of phyto- and zooplankton, benthos and chemistry of fish ponds; surveys of fresh-water communities.
Future Research Programmes	:	Intensification of pond culture of carps.
Training Facilities	:	Training can be given in methods of hydro-biological work.
Publications In	:	Acta Universitatis agriculturae, Brno (Sborník Vysoké školy zemědělské v Brně, řada A).

KATEDRA RYBÁŘSTVÍ A HYDROBIOLOGIE, VYSOKÉ ŠKOLY ZEMĚDĚLSKÉ V BRNĚ
(Department of Ichthyology and Hydrobiology, University of Agriculture in Brno)

Location	:	Brno.
Postal Address	:	Brno, Zemědělská 1, Czechoslovakia.
Name and Designation of Officer-in-Charge	:	Professor B. Kostomarov.
Number of Scientists Employed	:	3.
Physical Facilities	:	Biological laboratory; fish ponds covering a total of 3 ha; fish ponds managed by the State Fisheries.
Current Research Programmes	:	Pond culture studies of Cyprinus carpio, Silurus glanis and Coregonus lavaretus.
Future Research Programmes	:	Intensification of carp culture; studies on fertility and breeding of fishes.
Training Facilities	:	Restricted training can be arranged in biological investigations.
Publications In	:	Acta Universitatis Agriculturae, Brno (Sborník Vysoké školy zemědělské v Brně, řada A); Zoologické Listy (Zoological papers); Živočišná Výroba (Animal Husbandry).

VÝSKUMNÝ ÚSTAV RYBÁŘSKY
(Fisheries Research Institute)

Location	:	Vodňany.
Postal Address	:	Vodňany, Czechoslovakia.
Name and Designation of Officer-in-Charge	:	Ing. F. Chytra, Director.
Number of Scientists Employed	:	17.
Physical Facilities	:	Library; hydrochemical laboratory; biological and ichthyological laboratories; machine shop; aquarium room; experimental fish ponds; research boats.
Current Research Programmes	:	Fertilization of fish ponds, hydrochemistry, hydrobiology; biology and breeding of fish; acclimatization experiments; fishery economics.
Future Research Programmes	:	Further investigations on ways of increasing fish production in ponds, dams, lakes and streams.
Training Facilities	:	Training facilities available in the Institute laboratories.
Publications In	:	Práce Vúrh Vodňany; Buletin vúr Vodňany.

JÓZSEF ATTILA TUDOMÁNYEGYETEM NÖVÉNYÉLETTANI INTÉZET, SZEGED
(Institute for Plant Physiology of the University, Szeged)

Location	:	Szeged.
Postal Address	:	Szeged, Hungary.
Name and Designation of Officer-in-Charge	:	Professor I. Szalai
Number of Scientists Employed	:	5.
Physical Facilities	:	Fish ponds on different types of soil; facilities for research under natural conditions.
Current Research Programmes	:	Microbiological and chemical processes of water-logged soils; formation of anaerobic condition; reduction processes, mainly sulphate reduction; physiological effect of H_2S and NH_3 on plants and animals.
Future Research Programmes	:	Experiments in the control of H_2S formation in ponds by oxidization and binding; application of manganoxides and carbonates. Biochemical methods to demonstrate the toxic effect of H_2S.
Training Facilities	:	
Publications In	:	Journal of Soil Science, Plant and Soil; Acta Biologica, Szeged; Nature; Hidrológiai Közlöny (Hungarian with English summary).

KISÁLLATTENYÉSZTESI KUTATÓ INTÉZET, HALTENYESZTÉSI OSZTÁLY
(Department of Fish Culture, Institute for Breeding Small Animals)

Location	:	Gödöllö; experimental fish ponds in Szarvas.
Postal Address	:	Gödöllö, Hungary.
Name and Designation of Officer-in-Charge	:	Dr. Petöházi Gábor, Director.
Number of Scientists Employed	:	
Physical Facilities	:	
Current Research Programmes	:	
Future Research Programmes	:	
Training Facilities	:	
Publications In	:	

KISERLETI HALASTAVAK
(Experimental Fish Farm)

Location	:	Szarvas
Postal Address	:	Kiserleti Halastavak, Szarvas, Hungary P.F. 47.
Name and Designation of Officer-in-Charge	:	
Number of Scientists Employed	:	3.
Physical Facilities	:	Experimental ponds (600 ha); hatchery; laboratories.
Current Research Programmes	:	Artificial propagation; selection and hybridization; feeding; combined production of fish and ducks; culture of Chinese carps; rotation of crops in fish ponds.
Future Research Programmes	:	Continuation of current programmes.
Training Facilities	:	
Publications In	:	

KOSSUTH LAJOS TUDOMÁNYEGYETEM ÁLLATTANI TANSZÉKE
(Institutum Zoologicum Universitatis de Lodovico Kossuth Nominatae;
Zoological Institute, University of Lodovico Kossuth)

Location	:	Debrečen
Postal Address	:	Debrecen 10, Hungary.
Name and Designation of Officer-in-Charge	:	Dr. J. Szabó, Director.
Number of Scientists Employed	:	5.
Physical Facilities	:	Four laboratories for ecological and physiological work; fish ponds.
Current Research Programmes	:	Biological production of fish ponds; primary production; food chains; manuring; artificial propagation of different fishes; hormones of carp.
Future Research Programmes	:	Further hydrobiological investigations of fish ponds; physiological work on cultured fishes.
Training Facilities	:	Training facilities in hydrobiology and fishery biology for three to five candidates annually.
Publications In	:	Acta Biologica Debrecina; Halászat (in Hungarian).

HIDROBIOLÓGIAI OSZTÁLYA, ORSZÁGOS MEZÖGAZDASAGI MINÖSÉGVIZSGÁLÓ INTÉZET (OMMI)
(Department of Hydrobiology, National Institute for Agricultural Quality Testing)

Location	:	Budapest.
Postal Address	:	Budapest II, Herman Ottó u. 15, Hungary.
Name and Designation of Officer-in-Charge	:	Dr. E. Donászy, Head of the Department.
Number of Scientists Employed	:	3.
Physical Facilities	:	Laboratories for water analysis and toxicological research.
Current Research Programmes	:	Productivity of carp ponds; toxicology of insecticides.
Future Research Programmes	:	Continuation of current programmes.
Training Facilities	:	
Publications In	:	OMMI Évkönyv (Annual Report); Hidrológiai Közlöny.

AUSTRALIA
61501

INLAND FISHERIES RESEARCH STATION NARRANDERA, NEW SOUTH WALES STATE FISHERIES BRANCH, CHIEF SECRETARY'S DEPARTMENT

Location	:	Narrandera, New South Wales.
Postal Address	:	P.O. Box 182, Narrandera, N.S.W., Australia.
Name and Designation of Officer-in-Charge	:	J.S. Lake, Biologist-in-Charge.
Number of Scientists Employed	:	3.
Physical Facilities	:	27 outdoor ponds up to 0.6 ha in surface area. Four air-conditioned laboratories; darkroom; library; small boats; outboard motors; nets; workshop; three vehicles for field work.
Current Research Programmes	:	Breeding biology, behaviour and life history studies of endemic species; age-growth studies of major endemic species.
Future Research Programmes	:	Introduction of suitable sport and food fishes.
Training Facilities	:	Only in-service training for field and technical assistants of the station. Laboratory and office accommodation available for one visiting research worker.
Publications In	:	Departmental Research Bulletins; Australian Journal of Marine and Freshwater Research; Proceedings of the Linnaean Society of New South Wales.

THE OCEANIC INSTITUTE

Location	:	Makapuu Point, Hawaii.
Postal Address	:	Waimanalo, Hawaii 96795, U.S.A.
Name and Designation of Officer-in-Charge	:	Dr. John R. Hendrickson, Director.
Number of Scientists Employed	:	8, plus visiting scientists.
Physical Facilities	:	On the island of Oahu: brackish-water fish culture laboratory building with running sea-water laboratories; large tanks; beginnings of a library; large collecting boat; small motor boats; other scientific equipment. Field laboratory on the island of Molokai.
Current Research Programmes	:	Rearing mullet and milkfish in captivity; refurbishment of central Molokai ponds.
Future Research Programmes	:	Continuation of current programmes.
Training Facilities	:	
Publications In	:	

KRASNODARSKII FILIAL, VSESOIUZNOGO NAUCHNO-ISSLEDOVAL'SKOGO, INSTITUTA PRUDOGO RYBNOGO KHAZIAISTVA (KrasNIIRKh)
(Krasnodar Division, Research Institute of Pond Culture)

Location	:	Krasnodar.
Postal Address	:	Krasnodar, Ulitsa Gogola 34/2, U.S.S.R.
Name and Designation of Officer-in-Charge	:	N.I. Chizhov, Director.
Number of Scientists Employed	:	36.
Physical Facilities	:	Fully-equipped biological, hydrochemical and fisheries laboratories; two vans equipped for field work.
Current Research Programmes	:	Fertilization methods for Northern Caucasus region; polyculture of grass carps and other carps; ricefield fish culture; acclimatization of grass carp; polyculture in lagoons; studies on fish parasites and diseases in ponds.
Future Research Programmes	:	Grass carp culture with supplemental feeding; ecology of predominant invertebrates; trophic relations in ponds, lagoons and reservoirs.
Training Facilities	:	
Publications In	:	Trudy AzNIIRKh; Trudy AzcherNIRO; Trudy Zoologicheskogo instituta, Moskva, Akademiia Nauk SSSR; Trudy Ikhtiologicheskoi Komissii, Akademiia Nauk SSSR; Gidrobiologicheskii zhurnal; Rybnoe khoziaistvo; Trudy KrasNIIRKh.

SIBERIAN FISHERIES RESEARCH INSTITUTE (SibNIIRKh)

Location	:	Jumen.
Postal Address	:	Jumen, U.S.S.R.
Name and Designation of Officer-in-Charge	:	A.N. Petkevich, Director.
Number of Scientists Employed	:	60.
Physical Facilities	:	
Current Research Programmes	:	Fish productivity and fishery investigations of the inland waters of Siberia.
Future Research Programmes	:	Development of carp culture in southern part of Siberia.
Training Facilities	:	
Publications In	:	

STATE RESEARCH INSTITUTE OF LAKE AND RIVER FISHERIES (GosNIORKh)

Location	:	Leningrad.
Postal Address	:	Leningrad C-124, U.S.S.R.
Name and Designation of Officer-in-Charge	:	Dr. L.A. Kuderskii, Director.
Number of Scientists Employed	:	Total: 150; Fish Culture Scientists: 40.
Physical Facilities	:	Experimental fish culture station in Ropsha; 112 ha ponds; laboratories.
Current Research Programmes	:	Methods of increasing the productivity of ponds; methods of culturing carp, trout and whitefish (Coregonus spp.); fish diseases; fish culture in lakes; cultivation of invertebrates as food for fishes.
Future Research Programmes	:	Continuation of current programmes; large-scale culture of fish in pens and aquaria.
Training Facilities	:	Facilities for training 10 to 15 candidates.
Publications In	:	Izvestia GosNIORKh.

VSESOIUZNYI NAUCHNO-ISSLEDOVATEL'SKII INSTITUT PRUDOVOGO RYBNOGO KHOZIAISTVA
(The All-Union Institute of Pond Fisheries)

Location	:	Moscow oblast.
Postal Address	:	p/o Rybnoe, Dmitrov Region, Moscow oblast, U.S.S.R.
Name and Designation of Officer-in-Charge	:	Mrs. M.N. Gracheva, Director.
Number of Scientists Employed	:	160 scientists and 53 technicians.
Physical Facilities	:	160 ponds; 10 research stations in State fish farms of the Central region and in South and Central Asia; apparatus for electrophoresis and chromotography; automatic amino acid analyzer KLA-3; spectrophotometer; flame photometers; spectrographs; pH meters; extensive library; machine shop; small boats and outboard motors; permanent fisheries exhibition.
Current Research Programmes	:	Acclimatization of new pond fishes; studies on the multi-purpose use of waters, including fish culture; physiological aspects of fish feeding and methods of feeding in pond fish farms; pond fertilization and the development of other methods to increase natural productivity of ponds; selection and breeding in pond fish culture; development of new systems of pond fish culture; improvement of the biotechnique of trout culture in various regions; pond fish diseases and methods to control them; mechanization in pond fish culture; economical and organizational aspects of pond fish culture.
Future Research Programmes	:	
Training Facilities	:	
Publications In	:	Trudy VNIIPRH "voprosy prudovogo rybovodstva" (Transactions of the Institute of Pond Fisheries); occasional booklets.

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BYELORUSSIAN FISHERIES RESEARCH INSTITUTE (BelNIIRKh)

Location	:	Minsk, Komsomolskaja.
Postal Address	:	Minsk, Komsomolskaja 8/18, U.S.S.R.
Name and Designation of Officer-in-Charge	:	
Number of Scientists Employed:		
Physical Facilities	:	
Current Research Programmes	:	
Future Research Programmes	:	
Training Facilities	:	
Publications In	:	

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UKRAINSKII NAUCHNO-ISSLEDOVATEL'SKII INSTITUT RYBNOGO KHOZIAISTVA (UkrNIIRKh)
(Ukrainian Fisheries Research Institute)

Location	:	18 km from Kiev; branches in Lvov and Kherson.
Postal Address	:	Kiev 134, U.S.S.R.
Name and Designation of Officer-in-Charge	:	V.A. Murin, Director.
Number of Scientists Employed	:	105.
Physical Facilities	:	Experimental farms; reservoirs; hatchery in Donribcombinat (Slaviansk); specialized laboratories for studies on fish diseases, water chemistry, fish food and feeding, and genetics and selection of cultivated fishes.
Current Research Programmes	:	Techniques of fish culture in rivers, lakes, reservoirs and ponds; methods of increasing hatchery production; culture of phytophagous fishes; genetic selection and hybridization; fish feeds and feeding; use of irrigation channels for fish culture; fertilization of ponds and other water areas; control of diseases.
Future Research Programmes	:	Continuation of current programmes.
Training Facilities	:	Post-graduate training in ichthyology, fish diseases, and fish culture of three years' duration, leading to doctorate degree; refresher courses for fish farm managers and specialists in fish pathology.
Publications In	:	Rybnoe khoziaistvo.

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KAZAKHSTAN FISHERIES RESEARCH INSTITUTE (KazNIIRKh)

Location	:	Balkhash, Kazakhstan.
Postal Address	:	Balkhash, Kazakhstan, U.S.S.R.
Name and Designation of Officer-in-Charge	:	I.K. Ivanov, Director.
Number of Scientists Employed	:	70.
Physical Facilities	:	Experimental farm and pond laboratory.
Current Research Programmes	:	Research on the fisheries of inland water bodies, including ponds, of Kazakhstan.
Future Research Programmes	:	Methods of increasing productivity of inland water bodies of Kazakhstan and development of fish culture methods in the area.
Training Facilities	:	
Publications In	:	Transactions of KazNIIRKh.

FAO FISHERIES TECHNICAL PAPERS (RE)

This is one of a group of Technical Papers (see inside front cover) giving information about persons, institutions and organizations conducting research on, or interested in, a particular subject within the general field of aquatic sciences and fisheries. Some of these technical documents are selected lists of institutions or research workers, others are summaries or critical analyses of the functions and activities of a particular institute or organization. Further information and extra copies can be obtained from:

Biological Data Section
Fishery Resources and Exploitation Division
FAO, 00100 Rome, Italy

(Papers issued since January 1968)

FID/T77	Establishment, structure, functions and activities of international fisheries bodies - IV - Permanent Commission of the Conference on the Use and Conservation of the Marine Resources of the South Pacific	October 1968
FID/T78	Establishment, structure, functions and activities of international fisheries bodies - V - General Fisheries Council for the Mediterranean (GFCM)	October 1968
(Fr)	Création, structure, attributions et activités des organismes internationaux des pêches - V - Conseil général des pêches pour la Méditerranée (CGPM)	January 1969
FRi/T85	Directory of fish culture research institutions	February 1969

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